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ABSTRACT

This volume contains the proceedings of an international colloquium on higher education in federal countries with complex divisions of responsibility for the many facets of higher education. The volume is organized in four parts. Part I contains one paper, "The Federal Context for Higher Education" by Ronald L. Watts and a description of the discussion that followed its presentation. Part II offers detailed descriptions of higher education in seven federal systems: "Higher Education in Seven Federal Systems: A Synthesis" (David M. Cameron); "Higher Education in Federal Systems: Canada" (David M. Cameron); "Origins and Development of Federalism in American Higher Education" (Martin Trow); "Higher Education in Federal Systems: Australia" (Robert H. T. Smith and Fiona Wood); "Higher Education in Federal Systems: Switzerland" (Augustin Macheret); "Higher Education in Federal Systems: Germany" (Ulrich Teichler); "Higher Education in Federal Systems: Belgium" (Ignace Hecquet); and "Higher Education in Federal Systems: The European Community" (Pierre Cazalis). Part III summarizes discussions held at the colloquium on four issues in higher education: organization, planning and management; financing higher education; student mobility; and research planning and financing. Part IV covers the final session and contains rapporteur's comments titled "Hasty Generalization, Missed Opportunities and Oversimplifications: Overcoming the Obstacles to Understanding Higher Education (Whatever That Is) in Federal Systems (Whatever They May Be)" by J. Stefan Dupre and the discussion that followed. Many papers include reference notes. A list of participants and their addresses is also provided. (JB)

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Conference Proceedings

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Edited by
Douglas Brown, Pierre Cazalis and Gilles Jasmin

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Higher Education in Federal Systems

Proceedings of an International Colloquium held at Queen's University, May 1991

Edited by
Douglas Brown, Pierre Cazalis and Gilles Jasmin

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The Institute of Intergovernmental Relations

The Institute is the only organization in Canada whose mandate is solely to promote research and communication on the challenges facing the federal system.

Current research interests include fiscal federalism, constitutional reform, the reform of federal political institutions and the machinery of federal-provincial relations, Canadian federalism and the global economy, and comparative federalism.

The Institute pursues these objectives through research conducted by its own staff and other scholars through its publication program, seminars and conferences.

The Institute links academics and practitioners of federalism in federal and provincial governments and the private sector.

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Foreword

Systems of higher education are at the forefront of meeting the challenges of a global economy, and the increasingly difficult task of social and political integration in complex industrial societies. Meeting these challenges is more difficult, if more interesting, when combined in federal countries with complex divisions of responsibility for the many facets of higher education.

In order to explore and discuss these themes, the Institute of Intergovernmental Relations at Queen's University in Kingston, Ontario, Canada hosted an international colloquium on Higher Education in Federal Systems on 8-10 May 1991. Colloquium participants came from seven federal systems: Australia, Canada, Belgium, the European Community, Germany, Switzerland and the United States. Included among them were university administrators, academic specialists in higher education and federal systems, and both elected and appointed government officials.

This volume, published in both English and French, provides the proceedings of this unique and valuable gathering. It presents a concise digest of the extensive discussions on the conference themes: organization, management and planning; financing; student mobility; and research planning and financing. There are also specially commissioned papers on the federal context for higher education, and on the seven federal systems and their impact on higher education. The essence of the conference is distilled in the final section, the Rapporteur's Report, where it is concluded that higher education in federal systems defies simplification, but demonstrates over and over again the resourcefulness, experimentation, and strength in diversity that lies within federal systems.

The idea for this colloquium emerged from discussions among the sponsors of the project: the Institute of Intergovernmental Relations at Queen's University, the École nationale d'administration publique, the Research and Information on Education Directorate of the Department of the Secretary of State, Canada and the Council of Ministers of Education, Canada. The sponsors

represent two leading institutions of higher education in Canada, each from one of the two official language communities and the two chief governmental bodies charged with the coordination and exercise of Canada-wide higher education policy. Indeed the colloquium provided a rare opportunity for the federal government in Canada and the provinces to collaborate on a joint project. Their participation contributed to the success of the colloquium and to ensuring that the program was sensitive to the practical and pressing policy questions concerning higher education with which governments in federal systems are faced.

Participants at the colloquium were acutely aware that the federal system in the host country, Canada, was undergoing a fundamental period of constitutional questioning, which also affects higher education. As this volume goes to press these issues remain unresolved, although there is much promise for at least a partial settlement of constitutional issues in 1992. The presence of as many non-Canadians as Canadians in this colloquium served, nonetheless, to undermine excessive navel-gazing and produced a genuinely comparative context for the mutual exploration of common problems and solutions.

This exploration will be of interest not only to those who follow closely higher education policy, but al those who seek to gain a comprehensive picture of how federal states interact with a diverse and independent community of domestic interests. The pic'ure that emerges is one of considerable variety within and among federal systems, which serves to widen the potential scope for comparison and adaptation of one's own system. The decentralized market system of higher education in the United States compared with the centrally funded and controlled system in Australia is but one example. At the same time common threads appear, such as the decentralizing pressure of globalization, the almost universal failure of rationalized coordination (and equally universal the repeated attempts to impose it), and the importance of funding diversity to the integrity of the university. For the federal scholars, the proceedings offer further proof of the "dog's breakfast" of classifications of how policy is coordinated in one federal system or the other. However, they also offer ample evidence of the ironies and ambiguities that make every federal system work.

Finally, on behalf of the colloquium organizing committee and the editors of these proceedings, I would like to acknowledge the special support of the Research and Information on Education Directorate of the Department of the Secretary of State, Canada, which made this publication possible.

Ronald L. Watts
Chair, Organizing Committee
International Colloquium on Higher Education in Federal Systems
and Director (on leave)
Institute of Intergovernmental Relations
May 1992

Acknowledgements

The International Colloquium on Higher Education in Federal Systems was sponsored by the following generous contributors: the Research and Information on Education Directorate of the Department of the Secretary of State, Canada; the Council of Ministers of Education, Canada; the École nationale d'administration publique; and Queen's University.

The colloquium planning was the result of the joint efforts of the organizing committee chaired by Ronald Watts and its members: David M. Cameron, Dalhousie University; Pierre Cazalis, École nationale d'administration publique; John D. Dennison, University of British Columbia; Gilles Jasmin, Department of the Secretary of State; and George Molloy, Council of Ministers of Education, Canada. On their behalf we would also like to acknowledge the contributions of each of the authors of the papers presented at the colloquium, the chairs of each session and the rapporteur. We would also like to acknowledge the contribution of the interpreters and staff of both CIC and ISTS who provided simultaneous interpretation in English, French and German, and the staff of the Institute of Intergovernmental Relations for conference organization.

For the preparation of the proceedings at the Institute of Intergovernmental Relations we would like to thank Valerie Jarus, Patti Candido, Rachel Grashem, and Daniel Bonin.

Douglas Brown
Pierre Cazalis
Gilles Jasmin
Editors

PART I

The Federal Context

The Federal Context for Higher Education

Ronald L. Watts

INTRODUCTION

Before I turn to the subject I was asked by the organizing committee of the colloquium to address, there are a number of preliminary points relating to the colloquium that I thought I might make from my position as one who is involved as chairman of the organizing committee. First of all, I would like to thank David Smith for his support and interest in the colloquium and for presiding over this first session and for his rather voluminous introduction. I'd also want to add my own personal welcome to all the participants in this colloquium and a welcome from the Institute of Intergovernmental Relations, and the members of the organizing committee. On behalf of the organizing committee, I would like to express our appreciation for the support that we have received from the Secretary of State of Canada, the Council of Ministers of Education for Canada, from Queen's University as part of its Sesquicentennial celebration, from the École nationale d'administration in Quebec, from the Federal-Provincial Relations Office of the Government of Canada, and from the Government of Ontario. I would also like to take this opportunity to express my personal thanks to some individuals who carried a particularly heavy load in the organizing of this colloquium. Many of them took on added responsibilities unexpectedly when I discovered on short notice that I was going to Ottawa to assist the federal government in its work on constitutional affairs. I particularly want to thank Gilles Jasmin of the Secretary of State Office for Canada who took on a great many additional duties as a result of that sudden change, George Molloy of the CMEC who likewise took on additional duties late in the day, Pierre Cazalis who not only devised the original design for the colloquium but who has played a major role in working out liaison arrangements with the European participants, John Dennison of the University of British Columbia who has been our

contact with Australians, and David Cameron of Dalhousie University. David not only prepared a paper on Canada and a synthesis of the other country papers, but also agreed in the past month to take on some of the duties of the chairman of the organizing committee.

I would also want to add a special word of thanks to Stefan Dupré for his willingness to be the rapporteur for this colloquium. I know from having been rapporteur myself in past similar gatherings that it is a demanding task to try to distill the essence of what is discussed and pull it all together before the colloquium is even concluded its deliberations. Stefan is uniquely qualified both as a political science scholar in Canada on the operation of Canadian federalism and intergovernmental relations and particularly executive intergovernmental relations, and as someone who has been very active in the area of policy for higher education. During the 1970s he was the founding chairman of the Ontario Council on University Affairs, in which he set important patterns and traditions for the relationship between the government and universities within the province of Ontario. We are fortunate, indeed, that he has agreed to serve as rapporteur.

I also want to thank the various paper writers who prepared papers sometimes under pressure and duress so that the papers could be translated in time. Finally, I want to take this opportunity to thank the staff of the Institute of Intergovernmental Relations: Doug Brown, Patti Candido, Valerie Jarus, Darrel Reid, and Dwight Herperger who rose to the challenge of looking after the myriad of detailed arrangements that had to be made for the colloquium, especially with my sudden departure for Ottawa.

Since Principal Smith has drawn attention to the Queen's sesquicentennial celebrations, I thought I might add to his comments on that subject by drawing to your attention a few particular features of the history of Queen's which illustrate the complexity of higher education in federal systems. The founding of Queen's occurred 26 years before Ontario and Quebec were split to become separate provinces in the new federation of Canada in 1867. Indeed when the Presbyterians of what is now Ontario and Quebec sought a charter 150 years ago from Queen Victoria to establish this university, John A. Macdonald, who was later to be one of the founders of the Canadian federation and its first prime minister, seconded the motion for the founding of this university. So he was a founder of this university as well. One result of that particular circumstance was that 50 years after the granting of the charter, when Queen's sought to have the charter amended, the issue of whether this amendment should be made by Toronto or Ottawa was raised. The issue eventually went to the Judicial Committee of the Privy Council, which ruled that, although education under the BNA Act was an area of exclusive provincial jurisdiction, nevertheless, because the charter was granted to Queen's before Ontario and Quebec were split back in 1841, any amendment the charter in the case of Queen's required

federal legislation. And so all subsequent amendments to the Queen's University Charter have been by amendments through the parliament of Canada. Thus, Queen's is in a unique position among Canadian universities in terms of the status of its charter, since it requires amendments by the Government of Canada rather than by the Government of Ontario. It is worth noting, however, that the federal government has resisted any pleas from principals of Queen's for special funding as a result of that arrangement. John A. Macdonald, who seconded that motion to found Queen's that I referred to earlier, was approached by the early principals of Queen's soon after Confederation to see whether the federal government would provide special grants to Queen's. He wrote back firmly that this was an area of provincial jurisdiction and that therefore Queen's ought to go to the Ontario government. And so it has been ever since.

The result is that we have in this city, on two sides of the Cataraqui River, an interesting contrast which illustrates the complexity of higher education in a federal system. Across the river we have the Royal Military College funded totally by the Government of Canada, but which, when it decided 40 years ago to become a degree-granting institution, approached the Government of Ontario for the authority to grant degrees. Thus, we have across the river an institution funded totally by the federal government but whose degree-granting authority comes from Ontario. And on this side of the river, we have an institution whose degree-granting authority comes under the jurisdiction of the Parliament of Canada, but whose primary direct public funding comes from the Government of Ontario. It illustrates what a noted scholar of federalism and former Principal of Queen's, J.A. Corry, used to say: a neat and tidy mind is a crippling disability in understanding Canadian federalism.

Turning more directly to the subject of this colloquium, I think we are very fortunate on this occasion to be able to draw together an international group from such a range of federations to consider issues that relate to higher education in federal systems. And we are fortunate that for this purpose we have been able to draw from what might be called two domains. We have a large number of representatives from government, university administrations, scholars, and the private sector who are active in the field of higher education itself, as well as those who have been drawn from a range of federations including the United States, Australia, Switzerland, Germany, Belgium and Europe and from Canada. But we are fortunate at the same time to have the members of the International Association of Centres for the Study of Federalism, individuals who come from centres that have specialized in the study of federalism in these various countries who are here this week for their annual meeting. They are in a position to contribute from their knowledge of how federal systems operate and what implication that has for the operation of higher education within federations. I hope that this mix of those who have experience with systems of higher education in federations and of specialists in the study of federal systems

will provide to each group useful insights as well as the perspectives from different countries.

It is my task in this session of the colloquium to lead off by talking about the context within which higher education operates in these federations, that is, to discuss the common features of federal systems and the variations among federal systems as federal systems. First we will have the individual presentations about the operation of higher education in each of these federal systems. Then later we will go on to look at particular themes running through the different systems and the operation of higher education in them. Finally, we will finish with concluding remarks.

For my own comments, then, I want to focus on three areas. The first is the features that are common to federations as federations. What are the common features of federations that provide a common context for the discussions that we will have in the later sessions? What is it about federations as federations that establishes particular political constitutional contextual situations which affect the operation of higher education in them? Second, I will turn to variations among federations to alert us to significant differences that may affect higher education policies in different federations when we come to discuss those policies. And third, I will close with some comments on federalism as a response to contemporary conditions and challenges in the last decade of the twentieth century and looking ahead to the twenty-first century.

COMMON FEATURES OF FEDERAL SYSTEMS

Turning to the common features of federations as federations, I think it is important to look at what it is we share as political structures in our different federations because these political structures set the context for policy relating to higher education. That will help to explain some of the common problems that we share and what we can learn from each other about how federations have coped with these problems.

The first issue then is what distinguishes federations from other forms of political organization. Tomes have been written on the subject, and I among others have been guilty of contributing to that literature. But for those of you who are coming to this discussion not necessarily as scholars who have concentrated upon the study of federations but as individuals who have focused upon the operation of higher education in federal systems it is perhaps worth starting with some general outline of the features that federal systems have in common. Let me draw to your particular attention the contemporary discussion of this subject by Daniel Elazar who has pointed out that federalism involves a combination of self-rule and of shared-rule: self-rule plus shared-rule brought together in some kind of permanent contractual linkage, a linkage that is directed towards achieving and maintaining both unity and diversity at the same

time. Federal systems do this through establishing a framework within which the constituent units exercise self-rule in certain areas and federal political institutions exercise the shared powers in others. These are systems which are characterized primarily by noncentralization such that authority within the political system is constitutionally dispersed among constituent governments rather than being derived from one government devolving power upon another level of government. Another feature or characteristic of federal systems is the inevitable interdependence rather than independence of governments within the system.

In the traditional language of political scientists, federal systems represent the organization of territorial political authority in a form in which neither the central nor the constituent units of government are subordinate to the other. Neither level of government derives its authority from the other. Both derive their coordinate, that is nonsubordinate, authority from a contract embodied in a constitution and in that sense are of equal constitutional status.

In this respect one can distinguish federations from other forms of territorial organization. For example, in unitary systems although provincial and local governments may exist and there may even be a high degree of decentralization in such systems, regional and local governments are subordinate to the ultimate supremacy of the central government and they derive their authority from it. In other words, in a unitary system you have a hierarchical system of decentralization. In confederal systems as distinguished from federal ones, there may be a considerable concentration of central powers, but the central institutions are ultimately subordinate politically to the constituent units and derive their authority from the approval and consent of the constituent units. The representatives in the central institutions are delegates of the unit governments and major policies require the assent of the constituent governments. What distinguishes federations from these two other broad forms is that neither order of government derives its authority from the other level nor is subordinate to the other. Each derives its authority from a contractual constitution, which sets out the authority of both levels of government.

We may note examples of these different types of political organization. Among examples of unitary government that are usually cited are the United Kingdom and France. These illustrate that there may be all sorts of differing degrees of centralization or decentralization in unitary systems. Among examples of confederal systems are Switzerland in the period from 1291 until the Napoleonic conquest and again from 1815 to 1847, or the United States prior to 1789. In the contemporary world there is the European Community, a modernized economic confederation, although in its recent evolution it has been incorporating some federal features.

Here I must make an aside on the use of the term "confederation." Although political scientists may use the term confederal in a more precise technical

sense, we in Canada always like to confuse things and we describe the occasion when the various units were brought together to form a federation as "Confederation." But we are not the only ones who use that type of language. The title of the Swiss constitution is the Federal Constitution of the Swiss Confederation. In both these Swiss and Canadian uses of "confederation" the term refers to the act of bringing the units together into a federation. In other words, it is not a description of the structure, but rather it is a description of the act of bringing units together. This contrasts with the term confederal or confederation to refer to a particular kind of structure that contrasts with unitary or federal structures. Here in discussing terminology it may also be useful to employ the notion of a spectrum. When one gets away from the neat categories of political scientists or constitutional lawyers and looks at actual political arrangements and processes, one finds that these neat categories are not quite so sharp and may indeed tend to shade into each other. This is so especially when we move away from definitions limited to constitutional law to those encompassing political and administrative practices and public attitudes. At the borderlines, these categories may shade into each other. For example, it could be argued that the United Kingdom, which certainly has the chief characteristics of a unitary system is, nevertheless, more decentralized than the Federation of Malaysia which has a highly centralizing federal structure. Similarly, at the other border it could be argued that some of the most decentralized federations, for example the now defunct West Indies Federation, have been more decentralized than the economic confederal arrangements of the East African Common Services Organization or more recently the European Community. So we need to be careful about insisting upon hard and fast compartments of categories. Furthermore, it is also clear that precise distinctions are not paid very much attention by nationbuilders and leaders who often resort to hybrids combining elements of different systems when they are establishing new ones. The *British North America Act, 1867* has often been described by scholars such as Kenneth C. Wheare as predominantly federal but containing some unitary or quasi-federal features, at least in its original structural form. The European Community in its present evolution can be described as perhaps predominantly confederal but has introduced some federal features, and so on. For these reasons the notion of a spectrum is useful because, just as the different colours in a spectrum tend to shade into the next colour on the spectrum, so when we start talking about distinctions between confederal, federal and unitary systems at the margins they tend to shade into each other. In categorizing political systems it is also important to consider not only the written constitution but also the variety of practices and political processes that occur, and whether the system operates in a federal way, no matter what the precise wording and technical language of the constitution itself may be.

Having defined "federation" we may note that there are in fact a large number of examples of federations in the contemporary world. The number may vary a little according to how strictly one defines "federation," but in the contemporary world there are some 19 countries that are federations or at least claim to be. In North America we have the United States and Canada; in Latin America there is Mexico, Argentina, Brazil, Venezuela; in Europe: Switzerland, Germany, Austria, Czechoslovakia, and until recently, the USSR and Yugoslavia; in Asia and the Pacific: Australia, India, Malaysia, Pakistan, and Comoros; in Africa and the Middle East: Nigeria and the United Arab Emirates. It is worth noting that those 19 include five of the six largest countries in the world, China being the only exception. Elazar has also identified 21 other political systems which, though not formally federations, have incorporated some major federal features into their political structures. Included among these are Belgium, Burma, China, Colombia, Italy, Japan, South Africa, Spain, Tanzania and the United Kingdom to identify perhaps the most significant among them. It appears that federalism as a form of organization, either in terms of a full blown federation or in terms of a political system that has incorporated some federal features, is really not the exception to the rule but perhaps the prevailing norm in terms of political organization within the contemporary world. Furthermore, it is worth noting that there are some interesting examples of new and imaginative applications of the federal idea in attempts to respond to contemporary problems either global or particular to specific countries. That is one of the reasons why the organizing committee included in the range of examples to be examined in this colloquium those of Belgium and the European Community. Obviously we could not try to include the whole array of 40 countries that I have referred to. To enable fruitful discussion to occur there had to be some limits. Nevertheless, since Belgium and the European Community provide some interesting perspectives that the more traditional federations do not necessarily provide when we are looking at the operation of higher education within federal systems, they have been included.

Each of the federal countries that we are examining has grown out of conditions that are similar in major respects. They have arisen from pressures to obtain at the same time the benefits of both larger and smaller political units. Larger political units have been sought because of the particular advantages they have in terms of the larger common market that this created, in terms of influence in international diplomacy, and in terms of security i.e., for defence. Indeed one of the analogies that has always stuck in my mind is that which was advanced by the proponents of federation in the West Indies. They argued that a federation was like tying a bundle of sticks together. If you take one stick by itself it is easy to snap and break, but when you tie them together in a bundle it is very hard to break the bundle. On the other side smaller political units have been sought at the same time for a number of reasons. Smaller political units

are sensitive to their electorates, are closer to their citizens, express regional distinctiveness and express diversity related to ethnic, linguistic, cultural or historic roots. Federal solutions have enabled, at least in principle, the reconciliation of these dual pressures, through the contractual institutional arrangement in which sovereignty is, to use the traditional legal language, divided and allocated among the federal and constituent governments within the federation. Thus federalism seems to provide a political technique for combining unity with diversity. When we take the federal examples that we are looking at in this colloquium, a number of essential features appear to be common to these federations, and I shall now briefly enumerate these.

The first is that each of the federations has at least two orders of government existing in their own right under the constitution and acting directly on their citizens. The federal government is composed of members elected by the electorate of the whole federation and this central government exercises authority directly by legislation and taxation within the federation as a whole. (The European Community because of its confederal features does not, of course, fully express this characteristic.) At the level of constituent units of government, whether they are called provinces, states, cantons, *Länder* or republics, governments are elected by their own electorates and act directly by legislation and taxation on their own regional electorates. The essential point is that in these systems, neither of these orders of government is subordinate to or derives its authority from the other. Each level derives its authority from a contractual constitution which sets out the authority of the federal government and of the constituent governments.

The second point which derives from that is that in all of them, there is a formal distribution of legislative and executive authority and of resources between the two orders of government. The actual allocation of powers and the form in which they are allocated may vary, but in all of them, there is a formal distribution of legislative and executive authority and of resources.

Third, all of them are characterized by a written constitution defining the competence and resources of the two orders of government. That is the contractual element that I spoke of earlier from which both orders derive their authority. And if neither form of government is to be subordinate to the other, the constitution setting out the authority of both orders of government must not be unilaterally amendable by either level. Otherwise, the government that can unilaterally amend the constitution would be able to override the other. We had a somewhat unique situation in Canada up until 1982 in relation to constitutional amendment where the power lay at Westminster. Since the patriation of the constitution in 1982, however, we have become much more normal as federations go with constitutional amendments normally requiring the approval of Parliament and of seven provincial legislatures representing at least 50 percent of the federal population.

A fourth and important common element among federations is that there needs to be an umpire to rule on disputes between the two orders of government. In most federations, this has taken the form of a Supreme Court or a Constitutional Court. But Switzerland has a unique arrangement, at least in so far as umpiring the exercise of federal authority is concerned. The ultimate umpire is not a court or tribunal but the electorate itself, through the legislative referendum process, in which federal legislation that is disputed may be challenged and then be submitted to a referendum in order to rule on its validity.

A fifth feature of all federations is that there are arrangements in the institutions of their federal governments to ensure that the interests of minorities and distinctive constituent units receive special or weighted influence in the processes for arriving at national policies so that they are not persistently overruled by a permanent national majority. Usually this is achieved through a bicameral legislature in which the constituent units have equal or a weighted representation in the second chamber. Sometimes coupled with that is a system of checks and balances that ensures that regional views have ample opportunity for expression.

And finally, a sixth element that is common to all federations and that needs to be emphasized, is the inevitable interdependence of the two orders of government. The result has been a requirement for processes and institutions, what might be called collegial arrangements, to facilitate intergovernmental interaction, collaboration and coordination. Kenneth Wheare, one of the pioneers in the comparative study of federations, argued that if the two orders of government in a federation were to be coordinated, that is neither level was to be subordinate, then the two levels of government would have to be independent of each other. The argument was that dependence on another level of government would imply subordination and therefore governments in a federation would have to be independent of each other. This has often been taken to assume that the two levels had to operate in watertight compartments. But scholars who have looked at the actual operation of federal systems (Daniel Elazar when he made a study several decades ago on the early years of the American federation and Garth Stevenson more recently in looking at the earlier years of the Canadian federation), have found that right from the beginning there was an element of interdependence between the two levels of government. There may be more of it now than there was a hundred or two hundred years ago, but right from the beginning interdependence, at least in some areas, was unavoidable. And so I think it is fair to say that what is predominant in federal systems is not the independence of the two levels of government from each other but their mutual dependence or interdependence. How does one reconcile this with the concept of nonsubordination or coordinate powers? The answer is that there are in fact two logical alternatives to one-way dependence. One is independence of the two orders. The other is balanced mutual dependence or interdependence

in which one level is not alone in being dependent on the other. Where dependence is in both directions, we have interdependence without subordination. In practice, every federation has found that sort of mutual interdependence an essential feature.

Looking at the common features of federations then, what are the implications of these for the subject that we are addressing in this colloquium, the operation of higher education in federal systems? That is what the rest of the colloquium will focus on, but here I shall just sketch a few themes. In a federation with the distribution of authority between two levels of government, higher education has generally been one of those areas in which both levels of government have had an interest. In most federations, education as such has generally been considered an appropriate area for provincial-level jurisdiction. But when it comes to the area of higher education, particular problems have tended to arise with simply leaving the area of jurisdiction solely to one level of government. Because higher education is clearly an important factor in the development of the cultures and the distinctive historic traditions within the constituent units, especially in federations with a multilingual or multicultural character, there will always be a very strong pressure for higher education to remain under the control of the constituent governments. But because higher education is a crucial factor in producing the educated human resources and research required for international economic competitiveness, there will be pressures for a federal involvement as well. This is so especially in relation to the human resources needed to provide international competitiveness to facilitate economic development and welfare. It also arises from the expensive resources needed for modern science and learning in a knowledge-based society. Higher education turns out, therefore, to be one of those areas which characteristically is in an area of tension in terms of the appropriate roles of the federal and state or provincial governments within federations.

In the older federations, because higher education was almost always thought of originally as being included under education broadly defined, higher education has come jurisdictionally under the states or provinces. Nevertheless, there have almost always been subsequent efforts to resolve problems by the federal use of its spending power to assist states (or provinces), institutions, or students. In newer federations, there has often been a specific constitutional allocation of higher education as a separate area of authority from other forms of education, the most common pattern being to make higher education an area of concurrent jurisdiction or in a few cases even exclusive federal jurisdiction. What is clear is that, whatever the allocation of formal responsibility, whether in the older federations where it is related to the allocation of authority over education generally and hence to the states and provinces, or in the newer ones where it is often made an area of concurrent jurisdiction, higher education has

turned out to be an area requiring intergovernmental collaboration and cooperation between the two levels of government.

VARIATIONS AMONG FEDERAL SYSTEMS

I would like to turn now to variations among the federations because, although I have tried to identify some of the common features, there are important variations among federations that affect the operation of higher education in these systems.

Among the variations are differences in social conditions, i.e., differences in the degree of social homogeneity and diversity. The relative linguistic and cultural homogeneity of the United States, Australia, Germany or Austria (and I am not denying that there is diversity based on historical and other roots in those federations), contrasts with such federal societies as Canada, Switzerland, Belgium, India, Malaysia, Nigeria, and the former USSR or Yugoslavia. The latter group display the characteristics of multilingual, multicultural or even multinational federations bringing together very sharply divergent groups. This clearly affects significantly the degree and character of political integration that is possible, and therefore has implications in relation to policy relating to higher education. Because higher education has a strong relationship to the development of a particular culture, it is an area of special interest to the different cultural, linguistic, ethnic, or national groups in these federations, and thus introduces a greater element of tension about the relative roles that should be taken by federal and state or provincial governments. There are as well variations in terms of the number and significance of linguistic groups and their relative size. Where there are just two major groups as in Canada, Belgium or Pakistan (before it split), there tends to be the sharpest degree of polarization than exists in the more multilingual federations such as Switzerland. Equally important is the degree to which social diversity is crosscutting or reinforcing within a federation. Historically it has been argued, at least by commentators from outside Switzerland, that one of the factors that has contributed to the ability of Switzerland to hold together its internal diversity is the fact that linguistic divisions, religious divisions, and other divisions do not all coincide — they cut across each other. You have Catholic French cantons, and Protestant French cantons, German Protestant cantons, and German Catholic cantons and so on. Thus, on different issues cantons tend to ally with each other differently, thus reducing the tendency to cumulative polarization. In some other federations, however, Canada and Pakistan being historically the sharpest examples, you have factors which differentiate the constituent units that tend to reinforce rather than cut across each other and this sharpens the divisions that have to be dealt with.

Apart from these variations in the character of underlying social diversity, there are variations of institutional structure that affect the sort of policies that can be implemented within federations. There is a wide range of variations, for instance, in terms of number, relative size, and wealth of the constituent units within a federation. There is a world of difference between the United States composed of 50 states or Switzerland composed of 26 cantons, and Australia composed of 6 states or Canada of 10 provinces in terms of the relative clout or influence that the individual constituent units can have on the national scene or in terms of intergovernmental negotiations. To Canadians who in recent years prior to 1990 have become used to something like three or four meetings a year of first ministers (that is meetings of the prime minister and the premiers of the ten provinces) it was surprising to read in the press that the president of the United States had met just a year or so ago with the governors of the United States to talk about education, and that this was the third time in American history that such a meeting had occurred. One can understand with 50 governors that that sort of meeting is likely to be somewhat more unwieldy than a Premiers' Conference in Australia, involving the prime minister and just six premiers, or a First Ministers' Conference in Canada involving the prime minister and ten provincial premiers. The number of units certainly affects the sort of relationships and the character of the interaction that may occur. But so does the absolute size and wealth of the units. There is an enormous variation in the size of constituent units within federations as exemplified by California with a population larger than the whole of Canada, or Ontario which is substantially larger than the total population of Switzerland. When we compare the size of the smallest Swiss canton with such large states or provinces we are really talking about very different kinds of units. After all, California ranks something like sixth or seventh in the world in terms of gross domestic product. The point I am trying to make is that the sort of activities that the constituent units can sustain or perform may be very different when you have 26 relatively small cantons in a federation like Switzerland than can be performed by a state like California. Martin Trow from California has in the past described the federal character of the organization of higher education *within* California itself, describing the various tiers of university systems there. When you compare that to the very provinces in some federations or the cantons in Switzerland that do not have sufficient size or resources to sustain even one institution of higher education the result is a very different sort of dynamic in terms of the relative role the federal or constitutional governments might play in policy relating to higher education.

Apart from variations in the absolute size of the constituent units, there are also significant contrasts in some federations in the relative size and wealth of the constituent units composing them. For all its size California still represents only 10 percent of the total population in the United States. In Canada, Ontario

represents something like 37 percent within Canada and when you add to that Quebec, which is another 25 percent, the relative dominance of those two provinces as a percentage of the total population affects the political dynamics in the operation of the federal system and the sort of interprovincial negotiations and arrangements that are likely to occur.

There are variations among the federations represented at this colloquium as well as in terms of the form which allocation of jurisdiction to the two orders of government has taken. In Canada, at least as originally formulated in the constitution in 1867, the emphasis was upon trying to demarcate in sections 91 and 92, areas of exclusive federal jurisdiction and exclusive provincial jurisdiction with only very limited areas of legal concurrency (concurrency being limited to agriculture and immigration). As a result, in a great many areas we have had to develop *de facto* arrangements for shared responsibility in areas where federal and provincial authority are necessarily interrelated. In other federations, there has been a recognition in the constitution of large areas of formally concurrent jurisdiction. The United States and Australia are classic examples, but perhaps the most extreme example in this respect is Germany. Here there is, in fact, even a variety of forms of concurrent jurisdiction including some specifically related to "joint tasks" of the federal and *Land* governments. Furthermore, in Germany and to a considerable extent in Switzerland, in a substantial area legislative responsibility lies with the federal government but administrative responsibility for the same area lies, as stipulated by the constitution, with the states. Such arrangements affect the sort of policy relationships that can be worked out and the sort of roles that the different governments can play in relation to higher education.

Another issue relating to the allocation of jurisdiction between federal and state governments is the degree to which it is symmetrical for all the units within the federation or is asymmetrical, i.e., differs in terms of the degree of autonomy or responsibility assigned to different units within the federation. The most extreme example of an asymmetrical arrangement is that which occurs in Malaysia where two of the states, the Borneo states of Sabah and Sarawak, have a quite different distribution of responsibilities from those of the other states within the federation. I mention this particularly because one of the burning issues in Canada in recent years, certainly during the debate over the Meech Lake Accord and again at the current time, relates to the question of whether the distribution of powers must be uniform among all the units within the federation. There are some in Canada who have argued that it is an essential feature of federalism that the distribution of authority must be uniform among all provinces, and that all provinces must be equal. Unity among provinces in the powers assigned to them is clearly more common than asymmetry, but we cannot say that that is a defining characteristic of federations since there do exist federal systems that have quite significant forms of asymmetry. Not only

Malaysia, but to a lesser degree a number of other federations such as India provide examples. But variations such as these do affect the relative roles of governments and the relative relationships that may exist between them.

There are also variations among our federations in terms of the character of their central institutions. Particularly important, I think, is the distinction between those federations that are parliamentary in form, i.e., that have responsible cabinet governments, and those that have a presidential or a collegial form of executive in their central institutions. This difference is important because of the impact it has upon party discipline, the role of political parties, and the degree to which regional interests get adequately or inadequately expressed in the processes of national policymaking. Particularly significant is the effect a responsible cabinet system, in which the cabinet is responsible to the first chamber, has on the role and influence of the second chamber as representative of regional interests and the degree to which even the second chamber may be dominated by party discipline rather than by regional interests. The parliamentary federations that are represented at this colloquium would be Canada, Australia and Germany. Germany in the Bundesrat, however, has a unique federal institution which provides a channel for the expression of executive federalism through the representatives — representation of state executives within the national institutions.

There are variations too among our federations in terms of the character of the constitutional umpire. A number of our federations, not the least because constitutional amendment has proved a particularly difficult process, have come to rely very heavily on the courts for judicial review and adaptation of the constitution to changing circumstances. In this respect, Switzerland is perhaps unique among the federations represented here both in terms of the degree to which it has been open and flexible to constitutional amendment and has in addition, through the process of legislative referendum, provided an electoral umpire rather than a judicial umpire for the operation of the federal system.

Finally, there are institutional variations in the processes for intergovernmental collaboration. In the parliamentary federations there has been a tendency for intergovernmental relations to focus primarily upon relations between the executives. Indeed, although much criticized in Canada recently, executive federalism has been the typical method of intergovernmental relations not only in Canada, but also in Australia and Germany. In the latter case it has been institutionalized in the Bundesrat. On the other hand, in federations like the United States with its presidential system and its diffusion of centres of decisionmaking within each level of government, intergovernmental relations have displayed a very different character. The cockpit for the discussion and deliberations shaping intergovernmental relations is not so much through intergovernmental executive negotiation as through the processes of Congress, the

operation of its committees and the lobbying of intergovernmental interests within Congress. And we have in Switzerland as well the tradition of widespread consultation on intergovernmental issues.

In looking at these institutional variations within federations there are two sets of issues that are we have found particularly significant in Canada, although not unique to Canada, which are worth emphasizing. The first is variations in terms of the degree of centralization or decentralization within federations. While I agree wholeheartedly with Elazar's emphasis upon the notion of "noncentralization" as the primary element in federations, the language of centralization and decentralization is frequently used to describe the differing degrees of concentration of responsibilities in one level of government or the other. Clearly there are variations among our federations in terms of the scope of powers allocated to one level of government. These differences reflect the degree of social diversity and geographic characteristics. For instance, one of the factors that affects the Canadian situation is that the provinces are like a string of beads from east to west with most of the population in a narrow band not much more than a hundred miles wide along the American border. That is a very different situation from the United States where you have large numbers of states that are not strung out in one single line but really form a matrix of units combined in the whole. It is not surprising, therefore, that one tends to get much more discussion in Canada of notions like centre and periphery because those in British Columbia or Newfoundland very much feel that they are on the periphery and a long way from Ottawa. And so in Canada there is a sense that the federation has a central part dominated by the two largest provinces in the country and a group of smaller provinces at the eastern and western peripheries. This is a very different situation from other federations where the units are not strung out like that geographically.

The second issue is that of symmetry or asymmetry of units. Most of the literature on federations has assumed that symmetry is the norm. And in practice it is the norm, although not exclusively so. Indeed in all federations there is a considerable degree of asymmetry in terms of economic wealth and populations of the constituent units. At what point this asymmetry of economic circumstance and of population needs to be recognized in the political and constitutional structure is one of the issues that is certainly present in current Canadian discussions. It is a particularly relevant issue when we are examining arrangements in relation to higher education because it raises questions about the degree to which each constituent unit can provide the same level of higher education. If the constituent units do not have the capacity to provide similar levels of higher education and research then there may be a need for action at the federal level to assist those provinces, states, or units that cannot sustain higher education or research at the same level as other units. Furthermore, if some of the units are very small, such as in some Swiss cantons, there may be

a question of whether they are in a position to sustain any universities or major research institutions at all. In such cases national or shared institutions may be the only solution.

On the subject of variations among federations, mention should be made of the significance of new mutations of the federal idea and of hybrid political systems. I have already noted that nationbuilders and leaders are not bound by the formal categories of political scientists or constitutional lawyers. It is certainly clear that in the post-modern epoch, with the erosion of the nation state in both directions and the growing impact of international organizations, and the pressures for new ways of recognizing identity and accommodating diversity, there are new political forms developing. It will be very important for us to pay attention to some of these new mutations and ideas to see what we can learn from them about new ways of coping with the sorts of problems that traditional federations have attempted to cope with.

To summarize, what then are the implications of these many variations among federations for policies for higher education? First, variations in the degree of centralization or decentralization within our federations will have implications for the kind of policies for organizing higher education that they adopt. To take an example, the relative centralization in Australia and decentralization in Canada, which are perhaps near opposite extremes of the band that we are looking at, suggest that these may be expressed by different policies and arrangements relating to higher education. On an earlier occasion Bob Smith (a participant in this colloquium) drew the distinction between "hard" and "soft" federalism in describing the different federal government role in Australia and Canada in the area of higher education. That is not something that arises simply out of issues relating to higher education; it arises out of the character of the federations themselves. If we are going to understand the variations in policy in relation to higher education in our federations we have to understand the basic differences in the federations themselves and how the variations in the political and social character of the federations influences that policy.

Second, the degree of effective collaboration or competition that is going to exist between governments in a federation in the area of higher education is affected by the character of the federation. In this respect, Germany and Switzerland perhaps have the highest degree of intergovernmental collaboration. The arrangements there might be described as "interlocked federalism" in terms of the degree of collaboration that exists between levels of government in part because the division of authority is between legislative and administrative responsibilities, and in the German case also because of the identification of joint tasks and framework legislation. These illustrate how the general character of the distribution of powers in a federation has an influence on the sort of collaboration between government that is possible.

FEDERALISM AS A RESPONSE TO CONTEMPORARY CONDITIONS

Finally, I will conclude with just a brief word about federalism as a response to contemporary conditions. I have outlined, as a context for the balance of our discussions, the common features that federations share and the variations among them that affect the operation and the organization of higher education. But in concluding I want to emphasize how today this issue has become one of increasing importance. Indeed it is at the very cutting edge of the development of our federations.

Writing in 1939, Harold Laskey in an article entitled "The Obsolescence of Federalism" declared, and I quote: "I infer in a word that the epoch of federalism is over." The federal government in its traditional form with its compartmentalizing of functions; rigidity; legalism; and conservatism was, he argued, incapable of coping with giant capitalism and the demands of large scale governmental action. The trend at that time, and Wheare's writings in the first two decades after World War II pointed in the same direction, appeared to be towards a concentration within nation states of central powers incompatible with the federal principle.

By contrast, the last 40 years has seen the proliferation of federal experiments in Europe, Africa, Asia, South and North America, many of them multinational in composition. Contrary to earlier expectations the experience of both developing and developed political systems indicates that transportation, social communications, technology and industrial organization have produced pressures not only for larger states but also at the same time for smaller ones. It can be argued that there are in the contemporary world two powerful, thoroughly interdependent, yet distinct and often actually opposed motives and trends. One is the desire to build an efficient and dynamic modern state and the other is the search for identity. The former is generated by the goals and values shared by most Western and non-Western societies today, a desire for progress, a rising standard of living, social justice, influence in the world arena, and by a growing awareness of world-wide interdependence in an era whose advanced technology makes both mass destruction and mass construction possible. Economic and security issues all push in the direction of larger units. But equally powerful and potent in the contemporary world is the desire for smaller, self-governing political units more responsive to the individual citizen, responsive to the desire to give expression to primary group attachments like religious connections, linguistic and cultural ties, historical traditions, and social practices. These are what provide the distinctive basis for a community's desire for identity and yearning for self-determination. These two trends can be summarized in the phrase, "in the contemporary world, being big is necessary while being small is beautiful."

What distinguishes the latter decade of the twentieth century has been the strengthening of both apparently contradictory forces. We appear to have at the same time pressures for integration and for disintegration. On the one hand we see the establishment of supernational organizations and associations, the European community being a good example, but also the growth of small states and the pressures for disintegration. Events in Eastern Europe, and the former USSR and Yugoslavia illustrate the strength of these pressures. What the federal solution does and what gives it its appeal is that it provides a technique of political organization for reconciling these apparently contradictory pressures. It permits action by a common government for certain purposes together with autonomous action by regional units of government for other purposes while recognizing the interdependence of both levels of government. This clearly has implications for policies relating to higher education for these policies are themselves under pressure from these two trends which federal systems must respond to.

There is a second development in the contemporary world which also has an important bearing for this colloquium. That is the impact of the global information society: i.e., the transformation of contemporary society from an industrial economy to a knowledge-based economy. In today's world the greatest proportion of new jobs is created in the area of knowledge processing and knowledge handling rather than through materials processing. Hence, we are in an era when societies emphasize and are concerned about international competitiveness (the buzz word of the 1990s), about productivity and about prosperity which will increasingly depend upon how well our countries use the brain of technology and knowledge as opposed to the brawn of industrial workers and industrial machines. Higher education which produces both knowledge and those educated to use it has become even more important, therefore, in each of our federations. Knowledge and higher education, of course, have always been international in terms of content, and universality. But in terms of its political implications it was traditionally been seen as something that was personal in the sense of relating to personal learning, something that could be carried out locally or at least at a regional level. And so in the nineteenth century it was not surprising that it was thought that higher education could be left to the private sector and provincial or state governments. But now with education and research becoming the key economic resources in our societies, and universities the key institutions or instrumentalities by which societies achieve this knowledge and through it economic competitiveness and prosperity, the whole human resources area has become a major issue in the relationship between federal and provincial or state governments. Indeed it is at the cutting edge of the sort of intergovernmental relationships that exist within federations.

So while traditionally universities could be seen as an area to be left simply to provincial or state jurisdiction with perhaps, when necessary, financial

assistance from federal governments to help with the increasing cost of complex modern science or equalizing the capacity of those states that did not have the resources to provide a full level of higher education, now it has become an issue of crucial importance within each federation as a means to its international competitiveness and its well-being as a totality.

Nonetheless, one cannot argue that because of that importance higher education should simply be handed over to federal responsibility. We have to take into account that other push in contemporary society I referred to earlier, the pressures for identity and for local self-government. By local I mean not just municipal government, but in the broader sense the expression of identity for distinctive groups and communities represented by provincial or state governments. For them higher education is an important factor contributing to the expression of their identity. Higher education, therefore, is not just important to national well-being. It is also particularly important to the continued distinctive culture and identity of the constituent units within the federations. In the Canadian example, higher education is important as a national enterprise for the country as a whole as well as for the Acandians, the anglophones in Montreal, and the many other groups across the country. It is also a means of maintaining their own distinctiveness within the federation.

The human resources issue, of which higher education is a major element, epitomizes the dual pressures for integration and for diversity within federations and the interaction of these two drives within the contemporary world. These issues point to the need for collaboration between federal and provincial governments, or federal and state governments, and to a recognition of the degree to which higher education is important for both orders of government within a federal system. I would simply conclude by saying that the issues that we are addressing in this colloquium are not simply of interest to the higher education community in each of our federations, but are also an issue of fundamental importance to the character, welfare, and balance of these federations as political systems.

Discussion

The discussion opened with a question regarding greater federal involvement and what form it might take in higher education and research. Ron Watts asserted the need for a balanced approach, which would address both national and regional concerns in the area of higher education. In Canada there is a growing concern that our educational system is not preparing Canadians with the right sort of education with which to respond effectively to the challenges and pressures of competitiveness and the increasing interdependence of economies arising from globalization. This concern has been expressed by the electorate across the country but not in the specific terms that higher education should become a federal responsibility. There is also the issue of the efficacy of Canadian dollars spent on higher education, as Canada ranks as one of the highest spenders.

Simply federalizing institutions will not offer a panacea to these problems as it ignores provincial/regional concerns and the importance of higher education to local cultural identities. The response must be collaborative. The challenge is to develop an effective collaborative response for education at both the undergraduate and graduate level, as well as in the area of research.

An Australian academic, Clifford Walsh, asserted that a clear distinction cannot be drawn between federal economic interests on the one hand and local identity interests on the other, as a recognition of economic interests also exists at the local level. How much collaboration is required given this mutual recognition of economic interests? And, where is collaboration needed (i.e., in funding)? This was followed by a discussion of the importance of economic competitiveness to provincial and state governments and the varying degree of cultural and linguistic cleavages that exist in different federal states, and the relative role that such cleavages play alongside economic interests. Federalism may exacerbate cleavages if they are not crosscutting. In Canada, both economic and cultural interests are pertinent. However, in other federal systems there are not the same cultural cleavages between regions.

Stefan Dupré discussed the new Canadian Labour Force Development Board, a collaborative approach being pursued between the federal government and individual communities. This bipartite body representing labour and business, and supplemented by other groups, has a national mandate to create corresponding local committees, which will have some executive decisionmaking and spending authority. This initiative recognizes that the markets for many skills remain local and that the federal government must follow local leads in responding to needs for skills placement and training. Traditionally, the federal government has purchased training in institutions in areas identified by its field officials in order to influence technical training. As a result, technical training has been captured by institutions to the exclusion of businesses and greater on-the-job training.

Next, constitutional issues were aired, specifically, the impact of a charter of rights on higher education, jurisdictional and funding arrangements, and the constitutional amending processes employed in different federal systems. Variations of a charter exist among federations. In Canada, the *Charter of Rights and Freedoms* is still a novelty, which has recently come to dominate and transform politics, while in the United States, the first ten amendments have been embedded in the political fabric from the beginning. Australia lacks a charter although there has been some discussion of one.

The uniform rights spelled out in a charter create tensions as they tend to undercut a federal system's ability to accommodate diversity and to allow different groups to co-exist. In Canada, Quebec's aspirations for constitutionally entrenched special status run counter to the Charter. A charter also holds implications for citizen mobility and higher education as it may dictate the extent to which a particular state or province is able to give preference to its own citizens. The effect of any charter doubtlessly depends on its contents. In Canada, the premier of Ontario, Bob Rae, would like to see a charter of economic and social rights. This would build standards into the system, which may then be enforced by the courts. In some participants' views, this may not be desirable and it may also be difficult to establish a set of standards on higher education that are acceptable to the provinces.

The ratification process for amending the constitution varies among federal systems. In some countries, particularly Germany and Switzerland, it is more flexible. In Canada the federal presence in higher education has been increased only through the use of the spending power. Such tools provide the flexibility to act without changing the constitution. However, they have also provided a rationale for retreat. Under a current program of deficit reduction, the federal government has cut back on transfer payments to the provinces, claiming that there is no federal constitutional responsibility in education. The current arrangements ("Established Programs Financing" or "EPF") are thus viewed by the federal government as a fiscal arrangement and not an issue of education.

One Canadian government official claimed that if post-secondary education were a concurrent responsibility, the federal government would be more likely to be involved. It was pointed out that numerous examples exist of areas that are not under federal jurisdiction but where the federal government has moved in regardless.

In Australia, higher education is essentially a concurrent power. Although not under the formal heads of power, the national government has basically assumed responsibility for universities through section 96 of the constitution and the use of the spending power. Other post-secondary institutions are funded and run mainly by the states. This funding dichotomy has led to problems in developing an integrated system. Questions also arise regarding the pertinent roles, responsibilities and administrative structures that need to be put in place if post-secondary education as a whole is to be recognized as concurrent in a *de facto* sense.

A dual arrangement also exists in Switzerland with eight cantonal and two federal universities. This has led to an asymmetry in the welfare of different universities, depending on which order of government or canton provides for them. Predominantly, then, the funding comes from the cantons and this has led to rigidities in creating new universities. Despite a willingness on the part of the federal and canton governments, any proposal must go to a referendum of the people of the host canton. The usual practice has been for such referenda to be defeated, as the public are not eager to foot the bill.

Ron Watts discussed the three different avenues for federal funding of higher education employed by Canada, the United States and Australia, and asked which was deemed to be more efficacious. In Australia, for the most part, funding flows from the Commonwealth government directly to the institutions. In Canada some student aid money is given directly. However, under the EPF arrangements, the bulk of federal funding goes to the provinces in the form of unconditional transfers, which are in turn disbursed to individual institutions. This arrangement has led to some acrimony between the federal and provincial governments. In the United States primary funding for higher education flows through the students. This form of assistance is important in a system of private and state-run universities. An American academic, Martin Trow, contended that this market-based arrangement tends to strengthen the consumers rather than the producers and creates a powerful political constituency for the form of student aid in the United States.

The discussion finished where it began with the question of centralization and decentralization. A German academic, Ignaz Bender, asserted that regardless of the orientation of a constitution, political exigencies can often act to overrule it, leading to either a strengthening of the central government or decentralization. Such was the case when centralizing forces put education on the national agenda in both the United States and Europe in the wake of the

launch of the first Soviet satellite. There is evidence that this technological challenge had a concerted impact on education.

It was noted that in the Canadian context any constitutional reform regarding higher education was likely to be decentralizing or asymmetrical in nature. A centrally-run system of education is unlikely in Canada because of the sharp cultural and linguistic cleavages that exist. As Ron Watts prescribed, change will more likely come in the form of collaborative intergovernmental negotiations and arrangements between orders of government than within a single order of government.

PART II

Higher Education in Seven Federal Systems

Higher Education in Seven Federal Systems: A Synthesis

David M. Cameron

FEDERALISM AND HIGHER EDUCATION

The purpose of this paper is to offer a synthesis of the papers on higher education in the seven specific federal systems prepared for this colloquium. In this, it will try to draw out common patterns and problems, as well as to note distinctive arrangements and mechanisms. The papers certainly offer a wealth of information and insight upon which to draw.

If there is one overarching theme to the seven papers making up this collection, it is that federalism, especially as it relates to higher education, takes a great variety of forms. Ulrich Teichler makes this point explicitly. He suggests that the study of higher education in federal systems must recognize three characteristics. First, each federal system is unique, with the result that few, if any, generalizations can be made about federalism and higher education, except that in comparison with unitary systems additional levels of government are involved. Second, federalism extends beyond governments and, consequently, nation-wide coordination is possible through a variety of institutional arrangements besides coordination by a central government. Third, because of the variety of federal arrangements, there is no obvious perspective from which one can judge them in terms of their relative effectiveness.[1]

Martin Trow adds to this by noting the variations that can exist even *within* a given federal system. Indeed, he draws examples from the United States to illustrate the point that variations exist not only between the states making up the federation, "but between sectors of higher education within states, and even between institutions within the same state sector."[2]

Moreover, every one of the papers makes it clear that federal arrangements are anything but static; a given federal system can change over time, even dramatically, in relation to the federal character of higher education and the

respective roles of central and regional governments.[3] Sometimes, as with Germany, change is associated with constitutional amendment. Other times, as particularly with Australia, profound change is possible without any alteration to the constitution.[4]

Nowhere is change more evident than in Belgium, which has been moving gradually towards full-fledged federalism for the past 20 years, and which might still be described as federalizing. Belgium's federal system is certainly distinctive, with its overlapping structure of linguistic communities and territorial regions.[5]

Europe itself is in the process of federalizing, and higher education is clearly central to this process. We are given two equally fascinating glimpses of this phenomenon, first in Pierre Cazalis' paper on the Community itself,[6] and then in Augustin Macheret's and Ignace Hecquet's discussions of the consequences of European integration on higher education and federalism in Switzerland[7] and Belgium[8] respectively. Canada, meanwhile, stands in crisis, the future shape and even the future existence of its federal system uncertain. Whatever the actual character of change turns out to be in Canada, it will almost certainly be profound.[9] There are some important lessons for Canada to be found in the experiences and current programs for higher education in the other federal systems, including the European Community.

All of this suggests at the very least that it would be folly to attempt to construct a simple categorization of federal systems on a scale running from centralization to decentralization in relation to higher education. The systems are too complex and too variable for that.

At the same time, there are some interesting patterns that emerge. Switzerland and Germany share in the European preference for nation-wide standards in relation to such matters as admission, transfer of credits, recognition of degrees, etc. And while both federations have developed unique and imaginative mechanisms for coordination and standardization that go far beyond mere concentration of authority in agencies of the central government, these central governments do nonetheless play more active and more influential roles in higher education than is the case in Canada or the United States. Belgium, on the other hand, is still working out its accommodation of regional and linguistic diversity with nation-wide coordination.

The North American tradition (excluding reference to Mexico in this context), by contrast, favours diversity among and within its constituent regional units, although this tradition has remained stronger in the United States than in Canada. In neither federation, however, is coordination of higher education accepted as a legitimate responsibility of the central government.

Australia offers the fascinating example of a federal system that appears to be moving from a tradition not dissimilar from that of the United States and Canada, to one even more centralized than would be acceptable in Europe.

Robert Smith and Fiona Wood describe this as a move from "soft federalism" to "hard federalism." The principal instrument in the transformation of the central government's role has been its preeminent fiscal position.

One lesson that may be drawn from the experiences of these federal systems is that the search for the appropriate balance between coordination and diversity is never ending. Yet this search is at the very heart of higher education policies in federal systems. National economic growth and competitiveness seem ever more surely to require that higher education, including research, be coordinated in pursuit of objectives set by public policy. At precisely the same time, academic excellence seems always the property of institutions that are allowed wide margins of autonomy. The balance between these competing values is ever a delicate one, in unitary as in federal systems. But it is the peculiar preoccupation of federal systems to have two orders of government contending for the coordinator's role. Nor do the two orders necessarily pursue the same objectives or the same priorities. Moreover, the European Community adds yet a third level of government seeking to coordinate higher education. No wonder the several systems have produced such a variety of approaches to the organization and management of higher education.

THE ORGANIZATION AND MANAGEMENT OF HIGHER EDUCATION

While a common idea of the university underlies the organization and management of higher education in all of the systems examined, there are some notable differences in structures and policies. One significant difference is the presence in only a few systems, and primarily in the United States, of private universities.[10] It is interesting to note the similarities between colonial attitudes to universities in the United States and Canada, and particularly the easy identity of formally "private" institutions with the public interest. Canada had no revolution, however. Nor did its courts protect university charters from legislative interference, as in the famous Dartmouth case in the United States. The upshot is that contemporary Canadian universities, while sometimes private in legal theory, are virtually all considered public in fact. By contrast, American universities still very much fall into two camps: public and private.

Martin Trow properly draws attention to this basic distinction, but he also notes that it constitutes only part of the incredible diversity of the American higher education system, and one the significance of which should not be exaggerated. He notes, for example, that all private universities receive public support, while all public institutions are funded in part from private sources: "The mixing of public and private support, functions and authority has persisted as a central characteristic of American higher education to this day, blurring the distinction between public and private colleges and universities."[11]

In each of the federal systems, higher education falls primarily under the constitutional jurisdiction of the regional governments. At the same time, in each of the federal systems the central government plays a significant role. The papers offer more than a few glimpses into the fascinating, if at times complex, means by which constitutional and practical considerations are managed, if not always fully reconciled.

The United States has perhaps the most decentralized system of higher education. The central government has virtually no direct control of institutional policies or management, and contributes only between 13 percent and 20 percent of the total support to higher education (depending on whether student loans are included). This, of course, has to be seen in the context of the total American system in which the central and regional governments combined contribute less than half of the total university operating revenues. It is perhaps not surprising that within this decentralized system, governing boards and presidents have traditionally wielded great management authority.

Decentralization is always a relative concept, and it is worth remembering that some of the American state systems of higher education are larger than those of some entire federations being examined here. California, for example, has more university and college students than all of Canada. Moreover, as Trow points out, the state systems vary enormously in terms both of levels of public support and of coordination. Measured either as grants per student or per $1,000 of state income, differences in state aid run to ratios of as much as 5:1. Similarly, state coordinating mechanisms, required as a condition of federal government support, run the gambit from those which function in effect as the governing bodies of the whole of the public sector of post-secondary education in the state to those at the opposite extreme which serve mainly as fact-gathering advisory bodies, and are themselves governed by representatives of the public institutions they are "coordinating."[12]

Canada also has a decentralized system of higher education, but not nearly so decentralized as in the United States. There is much less variation in levels of provincial support, for example. In 1986-87, the ratio between the highest per-student operating support (C$7,356 in Alberta) and the lowest (C$5,619 in Ontario) was just 1.3:1.[13] Interprovincial comparisons seem to have a greater vitality in shaping provincial funding policy than is the case for American states.

It is also the case in Canada that the central government has played a more prominent role in financing higher education. That role is diminishing, however. The current program of unconditional transfers to the provinces will, if nothing is done to change the course of federal policy, simply wither away over the coming decade.

Canadian provinces, like American states, also created intermediate or coordinating agencies. None of the Canadian agencies has acquired the central

position of the more powerful of their American counterparts, however, and several provinces have eliminated them altogether. Increasingly, Canadian provincial governments have been turning to ear-marked or targeted funding to ensure institutional compliance with government priorities.

As Augustin Macheret points out with considerable emphasis, the Swiss cantons are vigorous in the defence of their distinctive cultures and cultural policies. Nonetheless, the central government plays a much larger role in higher education than is the case in either Canada or the United States. Partly this is attributed to the constitution, which gives to the central government direct control of and responsibility for certain institutions and programs within the higher education system. Partly it results from federal legislation, authorizing grants to cantonal universities and creating both a science council and a national conference of universities.[14] But partly also, it seems to reflect a different appreciation of the need to coordinate higher education efforts in response to the globalization of economic competition and the regionalization of world trade. Macheret makes a further point about the organization and management of universities that strikes a well-known chord, at least for students of Canadian federalism. Noting that universities are everywhere characterized by the primary loyalty of their faculty members to disciplines and departments, Macheret argues that the university is itself a federal institution: a veritable community of communities![15]

Germany has a rather different constitutional arrangement from the other federal systems, with its emphasis on concurrent jurisdiction and its provision for framework legislation at the centre and wide discretion in implementation at the regional level. This has permitted the central government to regulate aspects of German universities that in other federal systems would be the responsibility of regional governments or the institutions themselves.

But as Ulrich Teichler emphasizes in his paper, this has not eliminated regional resistance to central coordination, nor has it ensured that central regulation is always effective. He makes the telling point that coordination from the centre worked reasonably well in a period of growth, but not so well when growth gave way to stability. Moreover, he notes the efforts of at least one central minister of education and science to move away from coordination through regulation, in favour of differentiation through competition. This, if successful, would move the German system in the direction of higher education in the United States. It may be of interest to note that this approach was also recommended recently by a three-person commission of inquiry in Ontario, of which the chair of this colloquium, Ronald L. Watts, was a member.[16] This is likely to be an issue of continuing interest in the search for a balance between decentralization and coordination, particularly in federal systems.

It is in Australia that the most dramatic changes have been made recently. Given the nature of the Australian constitution, which places responsibility for

education firmly in the hands of the regional governments, the control and direction now exercised by the central government and the extent of the consolidation now underway are little short of amazing. The change, as described so clearly by Smith and Wood, was made possible by the central government's preeminent fiscal position. But it is at least as interesting that the arguments cited to justify this massive centralization are very similar to those identified by Macheret in relation to Switzerland and Europe.

Smith and Wood have touched a nerve that is particularly sensitive in federal systems, where responsibility for economic development generally falls to the central government while responsibility for higher education generally rests with regional governments. The explanation of the resultant policy conundrum in Australia is worth quoting at some length. It captures the essence of one of the major challenges facing virtually every federal system. At the heart of the problem, Smith and Wood suggest, is "the nexus between the technology base, export earnings, and intellectual skills (or the knowledge base)."

> The creative exploitation of this nexus presents a formidable challenge, involving as it does education and training; retraining; research; improved technology transfer; the development of scientific and technological skills; and an improved international outlook. ... Nowhere is the challenge — and opportunity — greater than in the higher education system, because it is in it that much of the research and development capacity of Australia is to be found. And research and development is the activity through which the nexus may be exploited most effectively.[17]

Smith and Wood proceed to chronicle the steps taken by the central government to rationalize and coordinate higher education in Australia, particularly in the wake of the 1988 White Paper. They describe this, as noted earlier, as a move from "soft federalism" to "hard federalism," a distinction marked essentially by the determined intrusiveness of the central government.

The role of the central government in higher education in Switzerland and Germany is certainly more intrusive than anything known to Canada or the United States. But more than this is involved in the extensive coordination that has been attained in the first two of these federations. First, Germany's unique bicameral federal legislature (the Bundesrat) affords regional governments direct participation in the formulation of such federal legislation as the Framework Act for Higher Education. Of more direct relevance to other federations, however, are the several nongovernmental or quasi-governmental national bodies that exercise real influence in the formulation of public and institutional policies in both European federations. Perhaps most significant are the practical, contractual, agreements *between* regional governments which achieve interregional and even nation-wide coordination in some areas without necessarily involving the central government.

Canada's Council of Ministers of Education, with its subcommittee of ministers responsible for higher education, was modelled in part on Germany's

Permanent Conference of Ministers of Culture, but it has not acquired a similar capacity to coordinate regional policies. Smith and Wood note in a similar vein that while the Australian states took steps to coordinate higher education within their boundaries, "there was only limited coordination in higher education matters between states."[18] Canadians, in particular, might wish to consider the possible advantages of strengthening interprovincial coordinating mechanisms as an alternative to federal-provincial or, indeed, unilateral federal initiatives.

Several of the papers shed light on a further aspect of the organization and management of higher education: institutional autonomy. Indeed, this continues to be a common feature of higher education across all of the systems examined here. It is clear, however, that institutional autonomy is not the peculiar property of any specific form of governance. The United States and Canada, for instance, leave the determination of faculty salaries and working conditions almost entirely to individual institutions, and in both systems the faculties of a number of universities and colleges have chosen to bargain collectively under applicable state or provincial labour relations laws. In Germany, by contrast, these matters are largely incorporated in federal legislation.[19]

Australia has taken a dramatic course in this respect, introducing a system of nation-wide bargaining and arbitration in 1986, with faculty members represented by the Australian Association of Academic Staff and the universities by the Australian Higher Education Industrial Association. Significantly, the central government has not accepted responsibility for funding at the level awarded by the arbitrator. While Smith and Wood caution that the outcome of centralized bargaining will not be clear for some time, they assert nonetheless that the consequences will be "every bit as momentous for the academic enterprise" as the forced integration and consolidation of higher education institutions that followed the federal White Paper of 1988.[20]

Pierre Cazalis makes a particularly telling point in emphasizing the extent to which the pursuit of coordination within the tradition of institutional autonomy puts a premium on strategic planning and management at the institutional level. Yet he observes at the same time that the capacity for strategic planning is not the most notable characteristic of university leaders.[21]

Perhaps the last word on the topic of institutional autonomy properly belongs to the Rector of the University of Fribourg, Augustin Macheret. His lighthearted comments on faculty suspicions of useless schemes for centralization and his reminder that a good university organization is necessarily decentralized and participative, nicely capture the essential paradox of institutional autonomy: the source of dynamism and creativity, but also of disintegration and inefficiency.[22]

FINANCING HIGHER EDUCATION

Financing higher education is in all of the federal systems a joint responsibility of the central and regional governments. Within this commonality, however, there are wide variations in the respective roles of the two orders of government. Australia stands at one extreme, the central government having assumed the entire responsibility for funding universities, and simultaneously eliminating student tuition fees, in 1974. The central government has used this fiscal preeminence to shape the nature and development of the higher education system, most notably as the carrot to induce state-incorporated universities to join the unified national system introduced in 1988. Australia has backed away from its almost total dependence on central funding in recent years. Not only are states reentering the field, in pursuit of state training objectives, but the decision to eliminate tuition fees has also been rescinded.

The United States stands at the opposite extreme from Australia, with the central government providing only approximately 20 percent of the total support to higher education, almost all of it for research and student aid. It is worth noting, however, that the choice of these funding targets, and the associated allocative mechanisms, serves a strategic policy objective as well. By funding students and researchers, rather than institutions, the central government fosters institutional competition (for the available funds) and thereby promotes institutional diversity and research excellence. The other noteworthy feature of the financing of higher education in the United States is the relatively heavy dependence on tuition fees. This, in turn, is partly a reflection of the public-private dichotomy, with private institutions obtaining almost 40 percent of their revenue from this source, compared with less than 15 percent for public institutions.[23] Significantly, the proportion for public institutions in the United States is almost identical with that for all universities in Canada, where fees provided approximately 14 percent of operating income in 1986-87.

Turning to Canada, we encounter the most ambivalent role played by any of the central governments. While its support of research is extensive, its indirect support of universities via unconditional transfers to the provinces is without specific purpose, beyond intergovernmental equalization. On the other hand, the federal and provincial governments participate jointly in the provision of student aid, with provincial assistance stacked on top of federally guaranteed and subsidized loans (and with Quebec operating a wholly provincial scheme to which the federal government makes an equivalent fiscal transfer).

The financing of higher education in the European federal systems is joint, but the contributions of the central governments are not always as significant as might perhaps have been expected. In Germany, Teichler puts the central government's share, calculated in respect of capital construction, student aid, reform experiments, research, and international exchanges, at 17 percent.[24] For

Switzerland, Augustin Macheret puts the central government's share of base operating funding at 16 percent, with capital grants ranging from 35 percent to 60 percent of construction costs, depending on the fiscal capacity of the canton concerned.[25] Belgium's situation is, of course, unique, with the central government still exercising the preeminent role in public finance, and the linguistic communities only now beginning to come to grips with their responsibilities in relation to the funding of higher education. As Ignace Hecquet notes, the whole structure of university finance is currently under discussion in Belgium.[26]

Macheret's paper draws attention to what appears to be a growing trend in the financing of higher education: the use of targeted grants, ear-marked for specific purposes. In the case of Switzerland, these are employed by the central government to promote nation-wide objectives. In Canada's case, they are used by provincial governments to influence institutional policies and priorities. It appears that in Australia both purposes are pursued.

Perhaps the most important point with respect to the financing of higher education remains to be made. Although the data in the several papers do not support a definitive conclusion on this point, they do suggest that funding levels in Australia, Belgium, Canada, Germany, and Switzerland were severely constrained through the 1980s. Certainly this is true for Canada, where funding levels were held constant in real terms while enrolment increased by some 20 percent. Similarly in Belgium, Ignace Hecquet notes that funding levels per student fell by 29 percent after 1975.[27] In contrast, Trow indicates that state operating support in the United States *increased* over the decade by 23 percent *after* adjustment for inflation. This suggests that the priority assigned to higher education in the United States has been increasing relative to the other federal systems. Significantly, this priority manifests itself in state, rather than central, government expenditure decisions.

STUDENT ACCESS AND MOBILITY

It is significant that in every one of the federal systems examined here, the central government is involved in programs of student aid designed to promote access to higher education. At the same time, there is an evident difference between the continental systems (Australia, Canada, and the United States) and the European systems which are territorially more compact. Questions of student access and, in particular, student mobility loom larger in the latter systems. This is no doubt partly a simple reflection of the distances involved, with mobility between regions arising more frequently and therefore posing more salient issues for public policy in European federations. In the continental systems, questions of access are primarily questions of admission to institutions within the state or province of residence.

Partly also, this difference may reflect differences in political cultures. This is most pronounced in Germany, where the constitution itself has been interpreted to prohibit regional barriers or preferences with respect to student access. This constitutional interpretation evidently has popular support as well. As Teichler observes: "Cultural diversity is permissable but it is generally considered undesirable to establish regional barriers concerning access to education and to any form of employment."[28]

This is not to say that questions about access and mobility do not arise within the continental federations. Certainly for some Canadian provinces the influx of students from other provinces carries significant financial costs. No Canadian province yet levies higher tuition fees for out-of-province students, although there are no legal constraints that prevent them from doing so. Some American states do make use of this device.

Another question that does arise in continental systems concerns improving access for groups traditionally underrepresented in higher education. Federal student aid policy in the United States is designed in part to increase the participation of Black and Hispanic students in particular. In Canada and Australia concern is growing in respect of aboriginal peoples.

In the European context, access to higher education and to subsequent professional employment are evidently closely linked. Teichler points out, for example, that it was the constitutional right of Germans to choose a profession that led to decisions prohibiting regional barriers to mobility and access. Judicial decisions within the European Community may have even more far-reaching consequences, with the ruling that higher education falls within the definition of professional training and therefore within the jurisdiction of the Treaty of Rome. Macheret notes that even in a federal system not actually part of the Community, questions of mobility and access within Switzerland are driven by the larger agenda of European economic integration and the free movement of labour. Hecquet, meanwhile, describes some of the complications posed for Belgium's linguistic communities by the influx of students from other parts of the European Community.

It is important to note the extent to which policies respecting access and mobility within the European federal systems are the products of interregional agreements as well as central government policy or central-regional arrangements. The Swiss case is particularly instructive. An intercantonal agreement has operated since 1979, providing per-capita transfers for students studying in another canton. Even more impressive, at least potentially, is the interinstitutional agreement worked out by the Conference of Rectors in 1989, designed to facilitate mobility by standardizing the recognition of credits and credentials. By way of contrast, such standardization does not even exist *within* Canadian provinces, although in fairness the institutions themselves generally accept each other's transcripts at par.

Any comparative study of student access and mobility must confront the issue of tuition fees, and the question of whether fees do constitute significant barriers to access. Evidence is not decisive on this point, but it seems to suggest that tuition fees play at most a minor role in influencing decisions to attend university. The experience of the several federal systems with respect to tuition fees has been quite different, the European systems generally shunning fees and the North American systems incorporating fees as an integral part of their policies on the financing of higher education. Without suggesting any causal connection, it is at least worth noting that participation rates in Canada and the United States are substantially higher than in Europe.

Australia presents a particularly fascinating record in this regard, having abolished fees in 1974 only to reinstate them in 1989. What is particularly fascinating is the manner in which fees are collected under the new Higher Education Contribution Scheme (HECS). Students may pay a fee at the time of registration or defer payment until after they have graduated. In the latter case, repayment takes the form of an additional income tax levy, and is payable over a period of years after the student's income reaches the labour-force average.[29] Ideas along the lines of the Australian scheme have been under discussion in North America for some time, and at least in Canada's case have been recommended by several recent government commissions. None has yet been implemented, however. Usually, the proposals call for direct loans to students, with repayment contingent on post-graduation income. The Australian version appears to have some advantage in terms of simplicity.

Student aid is, in fact, one of two areas in which central governments play significant roles in all of the federal systems. The other area is research.

PLANNING AND FUNDING OF RESEARCH

Every federal system faces the same basic issue with respect to research: how to coordinate the research effort to promote selective nation-wide priorities within a decentralized university system. As several papers demonstrate, the responses to this issue are numerous and varied.

One response that has actually been pursued only in Australia is worthy of brief comment. This is the idea of a national, research-intensive university designed to provide leadership by example. The record of the Australian National University in this regard has certainly been significant. The failure, much earlier, of efforts to establish a University of the United States deprived that federation of what Trow refers to as a "capstone institution," one that eventually would have governed, shaped, and surely constrained the growth of graduate education and research universities in the United States.[30]

The more common approach in federal systems has been to separate research, at least to some extent, from other aspects of higher education and thereby to

facilitate a larger role for the central government in relation to research. This approach enjoys constitutional recognition in Germany and Switzerland, both of which place research on the list of legislative responsibilities of the central government. In Belgium, the continued constitutional preeminence of the central government leaves it with the dominant role in research. Indeed, in all of the federal systems examined here, the central government plays the preeminent role in relation to research. There seems always to be a measure of ambiguity in this approach. In both Germany and Belgium, for example, where the authority of the central government is clear, a large part of total government funding of research is channelled through general operating grants to universities.

This draws attention to the question of direct and indirect costs of research. The United States government has followed a policy of covering indirect institutional costs, over and above direct grants to researchers. As Trow notes, however, this has recently run into difficulties with the discovery that one of the most prestigious universities, Stanford, had been "padding" its accounts. Canada does not cover indirect costs, with the result that research-intensive universities suffer a relative fiscal penalty. Several provinces have recently moved to ameliorate this problem.[31] The discussion of this issue prompted Ulrich Teichler to note that such an argument would not arise in Germany, where institutional budgets are expected to cover research overheads.[32] The details of these different approaches might well be investigated further.

One common variation on the theme of separate treatment of research is the establishment of research institutes, distinct from or only loosely associated with universities. This allows the central government to pursue its research priorities without the encumbrance of competing institutional objectives. At the same time, it institutionalizes those very priorities, reducing future flexibility and adaptability.

Australia has recently embarked on a radically different approach, separating the research and teaching functions *within* universities. This is mostly the product of the dissolution of the binary post-secondary system. Where previously research was the responsibility of only some post-secondary institutions (the universities) it is now to be the responsibility of only some faculty members within larger and more comprehensive institutions.[33] The consequences of this will certainly bear watching.

Planning and funding of research typically fall to councils or commissions with nation-wide responsibilities and substantial academic representation. In some cases, separate councils deal with distinct disciplinary groupings. These research councils seem to work well in administering peer-adjudicated grants. They do not seem to work so well in promoting coordination or in formulating strategic research objectives. It is evident that the federal states examined here are still wrestling with the question of how such objectives can be determined

and administered effectively. Martin Trow draws attention to the competition that necessarily exists between the seemingly limitless demands of "big science" and the claims of "small science" within universities. Robert Smith and Fiona Wood observe, in the same vein, "a growing appreciation that for relatively small countries like Australia, concentration and selectivity are essentials in any national research policy."[34]

Australia and Canada have recently taken very similar steps in pursuit of this concentration and selectivity. Both have created special advisory bodies on science with direct access to the prime minister. And both have established programs of *networks* of centres of excellence, designed to draw personnel from several universities and from industry into research teams working on projects of national strategic importance.

CURRENT ISSUES

The coordination and direction of research remains perhaps the most critical challenge to higher education in federal systems. If it is the most critical challenge, it is not by any means the only one. By way of conclusion, it is appropriate to raise a number of issues regarding higher education which currently face both university and public policymakers.

For some of the systems considered here, federalism itself constitutes an issue of major importance. Certainly this is the case for Canada, where the very constitutional bargain is at risk. A variety of more practical problems surround this central issue, not least of which is the need to work out a more satisfactory federal-provincial accommodation than that currently embodied in the unconditional block transfer arrangement known as Established Programs Financing.

Federalism is an issue elsewhere as well. Certainly it is a pressing concern in Belgium, as the transition to a complex and asymmetrical arrangement continues. And, of course, Belgium's future will be shaped within the broader framework of European integration, itself an emerging federation. The prospect of federal systems within federal systems certainly poses challenges to the management and financing of higher education.

A second issue that is raised in particular by the experience of the European federal systems is the possibility of more effective *interregional*, and perhaps even interinstitutional, cooperation and coordination. None of the three continental federal systems have been particularly successful in this regard, although Canada has the basic machinery in place.

The question of coordination raises, in turn, the fundamental issue of the relative advantages of regulation over competition: coordination through regulation, or diversity through competition. Coordination through regulation certainly can yield a high degree of standardization, as the experience of Germany attests. But that same experience prompted Teichler to raise the

associated problem of institutional inertia. Even in the case of the United States, the bastion of diversity and institutional competition, Trow expresses deep concern over the growth in bureaucratic regulation associated with central government interventions designed to protect and promote civil rights objectives.

This takes us to the question of the instruments employed to pursue the policy objectives of two orders of government in relation to higher education and research. Different instruments will be appropriate to different federal systems, but there does seem to be merit in considering closely the advantages of separating support for specific policy objectives from the support of institutions. This approach fits rather naturally within the principles of federalism, facilitating as it does the regulation and funding of institutions by regional governments and at the same time the pursuit of the specific policy objectives of central governments within those institutions. If the latter are supported at or close to their full costs, then problems associated with the distortion of regional priorities can be minimized, and the capacity of institutions to make choices in pursuit of their comparative advantages can be maximized. Of course, the recent experience of the United States with respect to research overheads raises the ever-present issue of institutional accountability.

The relation between research and public policy raises a special set of problems. Several papers raise questions about possible tensions between the objective of research of high quality and the objective of research as an instrument of public policy. These questions and issues defy easy resolution. And as the private sector is increasingly drawn into the equation, questions about what and whose interests are being promoted, and who is setting the objectives and priorities, seem destined to intensify. These questions are difficult in themselves. They are rendered even more difficult with the involvement of two orders of government.

NOTES

1. Ulrich Teichler, "Higher Education in Federal Systems: Germany," pp. 141-42.
2. Martin Trow, "Origins and Development of Federalism in American Higher Education," p. 71.
3. These are the generic terms that will be used throughout this paper to describe the two senior orders of government in a federal system.
4. Robert H.T. Smith and Fiona Wood, "Higher Education in Federal Systems: Australia," pp. 95-123.
5. Ignace Hecquet, "Higher Education in Federal Systems: Belgium," below, pp. 169-92.
6. Pierre Cazalis, "Higher Education in Federal Systems: The European Community," pp. 193-212.

7. Augustin Macheret, "Higher Education in Federal Systems: Switzerland," pp. 125-140.
8. Hecquet, "Belgium."
9. David M. Cameron, "Higher Education in Federal Systems: Canada," pp. 45-67.
10. Some professional schools in Switzerland operate as private institutions, while private Catholic universities play a significant role in Belgium.
11. Trow, "Origins and Development of Federalism in American Higher Education," pp. 76-77.
12. Ibid., pp. 74-75.
13. Ontario, *Interprovincial Comparisons of University Financing* (Toronto, 1989), p. 5.
14. Macheret, "Switzerland," pp. 133-34.
15. Ibid., p. 132.
16. Ontario, Commission on the Future Development of the Universities of Ontario, *Ontario Universities: Options and Futures* (Toronto, 1984), p. 5.
17. Smith and Wood, "Australia," pp. 95-96.
18. Ibid., pp. 97-98.
19. Teichler, "Germany," pp. 146-48.
20. Smith and Wood, "Australia," pp. 116-17.
21. Cazalis, "The European Community," p. 204.
22. Macheret, "Switzerland," p. 132.
23. Trow, "Origins and Development of Federalism in American Higher Education," p. 72.
24. Teichler, "Germany," p. 154.
25. Macheret, "Switzerland," p. 133.
26. Hecquet, "Belgium," pp. 177-79.
27. Ibid., p. 177.
28. Teichler, "Germany," p. 164.
29. Smith and Wood, "Australia," p. 108.
30. Trow, "Origins and Development of Federalism in American Higher Education," pp. 83-84.
31. Cameron, "Canada," p. 58.
32. Teichler, "Germany," p. 159.
33. Smith and Wood, "Australia," p. 111-16.
34. Ibid., p. 114.

Higher Education in Federal Systems: Canada

David M. Cameron

CANADIAN FEDERALISM

Canadian federalism is in crisis. Little can be said with confidence about the outcome of this crisis at the moment, except that federalism in Canada is under immense pressure, which is only likely to increase. Federalism is unlikely to survive as it is. It may not survive at all.

The crisis was triggered by the failure of the proposed Constitution Amendment, 1987 popularly known as the Meech Lake Accord.[1] This package of constitutional amendments had initially been endorsed by all 11 first ministers, but had been ratified by only nine legislatures when the three-year time limit ran out on 23 June 1990.[2] Its failure struck a serious blow to Canadian federalism.[3] Most serious, perhaps, was the shadow cast by the evident rejection of Quebec's minimum demands for accommodation within a federal constitution, and the failure of the intergovernmental process through which tentative accommodation had been reached. The immediate aftermath has witnessed a surge of nationalist sentiment in Quebec, united in support of greater powers if not outright sovereignty for the province. At the same time, the Government of Quebec has affirmed its refusal to participate in further constitutional discussions, except bilaterally with the federal government.

The Canadian constitution is built upon the uneasy marriage of federalism and parliamentary government. The two principles pull in opposite directions: parliamentary government concentrates power in a central executive, while federalism divides power between two orders of government on the basis of legislative jurisdiction. The initial constitutional design gave preeminence to parliamentary government in a highly centralized arrangement that K.C. Wheare was moved to describe as quasi-federal at best.[4] Centralized government was at odds with the linguistic, cultural, and economic diversity of

Canada's provinces, and in a transformation as profound as it was gradual, centralization yielded to provincial maturity. The courts, including the Judicial Committee of the Privy Council of the United Kingdom, played no small part in this transformation.

The concentration of executive power in cabinet, the essence of the parliamentary system, has thus come to characterize two coordinate orders of government. Unencumbered by an upper chamber representing provinces in the federal legislature,[5] provincial cabinets and their first ministers, usually in firm command of their own legislatures, have emerged as forceful representatives of provincial interests. In this, they negotiate with their federal counterparts on matters of overlapping jurisdiction and mutual interest. Thus arises what the late Donald Smiley described as executive federalism: "the relations between elected and appointed officials of the two orders of government."[6]

The *Constitution Act, 1982* changed the nature of Canadian federalism. Despite overwhelming opposition from Quebec, a *Charter of Rights and Freedoms* was added which, by virtue of its protection of mobility and minority education rights, ran head-on into Quebec's established policies of official unilingualism and *francization*, policies which lie at the very heart of the province's determination to preserve its linguistic and cultural distinctiveness. More than this, the new constitutional package ceded to the federally-appointed Supreme Court the ultimate power of judicial review, ensuring the superiority of the court's interpretation of Charter rights over both federal and provincial legislation. Further, it scrapped the traditional amending procedure, formalizing the participation of the two orders of government, but denying to any province, including Quebec, veto power over the transfer of responsibilities from provincial to federal jurisdiction and requiring legislative ratification of proposed amendments. It was the dynamics of this last change which were played out with such awesome potential consequences in the Meech Lake debacle.[7]

It would be folly to suggest that the failure of the Accord means that the break-up of the Canadian federation is inevitable. That is a distinct possibility, however. There are, of course, other possibilities. One would be a transfer of federal legislative powers to all provinces, sufficient to meet Quebec's distinctive requirements.

Another possibility would be an asymmetrical structure in which Quebec would assume powers exercised elsewhere by the federal government. There is already a degree of asymmetry in the Canadian federal system. The question here is not whether asymmetry is feasible, but whether a balance could be found which not only accommodated Quebec's distinctiveness but also preserved an attachment to the broader, national, community sufficient to sustain a federal system.

Either outcome would be filled with irony, since the attacks on the Meech Lake Accord, including that of former Prime Minister P.E. Trudeau, were based

on two principal arguments: that the proposed amendments were too decentralizing and that no one province should enjoy distinctive status. There may well be other possibilities. If so, they will no doubt be canvassed in the coming months. The more serious problem is probably the collapse of the intergovernmental negotiating process itself.

Higher education did not surface as an issue in this constitutional debate. But higher education is never far below the surface of Canadian federalism. Indeed, to a very large extent the politics of higher education in Canada *is* the politics of federalism. This has been so for a long time.

FEDERALISM AND HIGHER EDUCATION

The first degree-granting institution in what is now Canada, King's College in Nova Scotia, was established in 1789 and received its Royal Charter in 1802.[8] Several others, including Queen's, McGill, Laval, and two additional King's Colleges (one of which formed the nucleus of the present University of Toronto, while the other eventually became the University of New Brunswick) were incorporated in the first half of the eighteenth century, all by Royal Charter. These were modest operations, even by contemporary standards. At the time of Confederation in 1867, there were only about 1,500 university students in all of Canada, and only five institutions had as many as 100 students.[9]

The major issue for public policy at the time had to do with public versus church control and support of colleges and universities. This "university question" bedeviled all of the provinces through the second half of the nineteenth century, and it is small wonder that the *British North America Act* in 1867 assigned full responsibility for education, along with hospitals, insane asylums and eleemosynary institutions, to the provinces.[10]

The advent of science, and its handmaiden technology, transformed the local and private nature of higher education beginning in the late nineteenth century. Universities took on a new importance for public policy which, in turn, raised new issues for Canadian federalism. The federal government moved as early as 1874 to establish the Royal Military College in Kingston. This was justified as a measure falling within the federal government's jurisdiction over national defence, but in this it established the principle that higher education, while itself a matter of provincial jurisdiction, might serve also as an instrument of public policy in areas of federal jurisdiction.

That principle lay at the heart of a debate in the early years of the twentieth century over responsibility for technical education. Was it a matter of education, and therefore wholly within provincial jurisdiction? Or had it more to do with economic development and federal responsibilities? In typical Canadian fashion, advice was sought from a royal commission, appointed by the federal government in 1910 with the support of all provincial premiers.[11] Two years

later, and even before the royal commission had reported, the federal government began supporting agricultural education. In this case, several provinces had already established agricultural colleges, so the model employed in the training of military engineers was preempted. Instead, a new instrument was introduced into the arsenal of federal-provincial diplomacy: the shared-cost program. The federal government offered grants to the provinces totalling $1 million* per year for ten years "for the purpose of aiding and advancing the farming industry by instruction in agriculture."[12]

The first World War gave new significance to science and technology. This time, the federal government acted more boldly. In 1916, it created the National Research Council (NRC), initially to undertake applied research in support of the war effort. The NRC established the federal government's preeminence in the field of research. In this, it chose to bypass the provinces altogether, making direct grants to university professors.

It was the second World War and its aftermath that brought forth the most dramatic federal involvement in higher education. Under the *Veteran's Rehabilitation Act*, the federal government made grants to the universities on the basis of $150 per veteran (as well as tuition and living allowances paid to the individual). And just as this scheme was terminating, the federal government in 1951 accepted the advice of another royal commission[13] and instituted a general scheme of grants to universities calculated on the basis of $.50 per capita of provincial population (a total of $7.1 million was provided for 1951-52).

This initiative led to an impasse between the federal government and Quebec. After one year, the premier of Quebec instructed the universities of the province to refuse the federal grants. The stand-off lasted until the end of the decade when it yielded to another innovation in fiscal federalism: contracting out. Under this arrangement, the federal government undertook to transfer corporate income tax room to the government of Quebec equivalent to the amount of funds that would otherwise have been earmarked for universities within the province.[14]

By this time, university enrolments were skyrocketing and all of the provincial governments were scrambling to find the resources necessary to support massive expansion. Both orders of government jumped in. The federal government unleashed a veritable arsenal of programs, including capital aid through the newly-established Canada Council, mortgage financing of student residences through the Central (now Canada) Mortgage and Housing Corporation, and loan guarantees and subsidized interest charges under the Canada Student Loans Program.[15] Federal expenditures on research also increased

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* Note: Unless otherwise noted all dollar ($) amounts shown in this chapter are for Canadian dollars.

dramatically, from about $1 million at the end of the war to over $10 million in 1959, and to more than $40 million by 1966.[16] Provincial efforts were no less prodigious. Over the decade of the 1960s, for example, provincial expenditures on higher education increased almost seven times (from $270 million to $1.8 billion), enrolment increased three times (from 114,000 to 316,000), expenditure per student more than doubled (from $2,400 to $5,700), and grants to universities rose from 9 percent to almost 14 percent of total provincial government expenditures.

All of the provinces were showing interest in a general restructuring of federal-provincial relations, including support for higher education. The federal government moved preemptively, announcing in 1966 its intention to assume complete responsibility for the vocational training of adults already in the labour force, while scrapping direct grants to universities (these had, meanwhile, been increased from $.50 to $5.00 per capita) in favour of a shared-cost arrangement with the provinces.

The scheme, which took effect in 1967, involved a transfer of equalized tax points[17] and additional cash grants sufficient to bring the total transfer to 50 percent of the operating expenditures of post-secondary institutions in each province.[18] The wealthier provinces had initially expected the transferred tax room to cover the costs of university support. This did not happen, and the federal government found it had signed a virtual blank cheque, with annual increases in transfer payments exceeding 20 percent. The federal government began looking for ways to control its liability. In 1972 a 15 percent ceiling was placed on annual increases in federal transfers, while the search for a more permanent solution continued. This brings us to the eve of the contemporary era, and here we turn first to a consideration of the organizational structures of higher education.

THE ORGANIZATION AND MANAGEMENT OF HIGHER EDUCATION

The organization of higher education in Canada is the product of historical evolution and provincial policy. In this, it reveals both significant differences and striking similarities across the ten provinces. The early universities were virtually all denominational in character. Provincial policy, on the other hand, has fostered public institutions. The manner in which these two forces were integrated goes to the heart of the organization of universities.

The four Atlantic provinces show quite distinct patterns. Nova Scotia had the most extensive network of denominational colleges and, perhaps more important, the most passive provincial policy.[19] That passivity continued through the period of rapid growth beginning in the 1960s, with the result that there are now no fewer than 13 degree-granting institutions for a population of just over

900,000.[20] New Brunswick, on the other hand, followed the recommendations of a royal commission in the early 1960s by concentrating its English and French programs into the University of New Brunswick (UNB) and the Université de Moncton. Two small, denominational institutions remain: Mount Allison University and St. Thomas University. The latter was, however, moved to the Fredericton campus of UNB (Mount Allison, meanwhile, is located almost on the border with Nova Scotia, in Sackville.) Prince Edward Island demonstrated that sometimes decisive government action is the surest route to institutional reform. In 1968 the premier issued an ultimatum that there was to be but one publicly-supported university on the island, and so there is. The University of Prince Edward Island was established a year later, absorbing two smaller colleges. Newfoundland is Canada's newest province, joining the federation in 1949. At the time it had only a small junior college, and thus was spared the denominational conundrum. Newfoundland has developed its single provincial university, Memorial, into the largest in the Atlantic region.

Quebec went through a major transformation of its social and political institutions, beginning in 1960 and subsequently characterized as a "quiet revolution." Higher education was very much a part of this revolution. Three French-language, Catholic universities (Laval, Montréal, and Sherbrooke) were transformed into public institutions, while the English-language Concordia was created by merging a college formerly operated by the Jesuits with a university sponsored by the YMCA. Two other English-language universities continued, McGill in Montreal and Bishop's in Lennoxville, the latter abandoning its Anglican Church control. Perhaps the most ambitious aspects of the educational reforms involved the creation of a new kind of institution, the Collèges d'enseignement général et professionnel (CEGEPs), and a new, multi-campus, provincial Université du Québec. The former offer two-year general academic programs that bridge high school and university, while the latter serves to demonstrate both the direction of provincial policy and the limited capacity of provincial governments to redirect the work of established institutions. The Université du Québec was designed to concentrate on undergraduate programs of the highest priority to public policy, especially teacher education, and was organized along what were then quite novel principles involving teaching modules rather than departmentalized programs. It has had little impact on the rest of the university system, however, and its flagship campus in Montreal was recently granted substantial autonomy, including the right to grant its own degrees.

Ontario managed its way through the great expansion of the 1960s without a comprehensive plan, but with considerable success in building a differentiated university system. Ontario had refused since Confederation to support denominational institutions. Moreover, it had succeeded in persuading Victoria (Methodist), Trinity (Anglican), and St. Michael's (Catholic) to enter into

federation with the University of Toronto, beginning in 1884. Queen's and Western chose to remain separate but nonetheless dropped their denominational connections. Several other colleges followed suit, under pressure of postwar growth, while a few universities were created as public institutions *de novo*. Ontario entered the contemporary era with a network of 16 universities.[21]

The four western provinces entered the realm of higher education later than their eastern counterparts, and as a result were able, for the most part, to by-pass the denominational college phase. The partial exception is Manitoba which, in this as in so many respects, stands as the bridge between east and west in Canada. Manitoba did, like other western provinces, insist on a single provincial university, but the University of Manitoba had a difficult time getting established and was for many years more a collection of colleges than a university in its own right. Indeed, it was the University of Manitoba that pioneered the idea of federating a number of denominational colleges with a provincial university. The pressures of growth led each of the western provinces to give up on the idea of a single provincial university after 1960. British Columbia elevated Victoria from junior college to university status, and created a new university, Simon Fraser, almost literally overnight. In doing this, it established a new legislative framework, a single universities act governing all three institutions. Alberta and Manitoba followed this example but took it a step further, providing for the establishment of individual universities by mere cabinet order.[22] Alberta created both the University of Lethbridge and Athabaska University in this manner, having first granted autonomy to the Calgary campus of the University of Alberta. Manitoba gave autonomous status to two former affiliates of its provincial university which became, in turn, Brandon University and the University of Winnipeg (formerly United College). Saskatchewan held to its one university policy the longest, but in response to bitter conflict between two campuses it was forced to separate the University of Regina from the University of Saskatchewan, the latter continuing with but one campus in Saskatoon. British Columbia recently announced its intention to create a fourth university, The University of Northern British Columbia, in Prince George.

Leaving aside federated and affiliated colleges and institutes, the structure of higher education in Canada consists of 54 degree-granting institutions. If the constituent units of the Université du Québec are counted separately, the number increases to 59. The principal universities of Canada, by province, are listed in the appendix.

The contemporary structure of universities in Canada reflects several salient characteristics. Five of these warrant particular attention here. First, and with the very significant exception of research, which will be discussed shortly, higher education is a provincial responsibility. Direct federal participation is limited to the military colleges, now numbering three.[23] Significantly, even

these federally-controlled institutions offer degrees under provincial legislation.

Provincial responsibility does not necessarily translate into parochial policy. While there is much divergence among the provinces in their approaches to universities, there is a great deal of convergence as well. Federalism does foster diversity in provincial policy, but it also limits the scope of diversity. Provinces learn from one another, and are very much influenced by interprovincial comparisons.[24] Moreover, provincial governments do not deal simply with individual universities or even provincial systems. Universities have built pan-Canadian and international networks of associations and interest groups which are no innocents when it comes to protecting common academic and institutional positions. The Association of Universities and Colleges of Canada (AUCC) and the Canadian Association of University Teachers (CAUT) are the two most comprehensive interest groups. Despite their denominational and private origins, all of the major universities in Canada are now provincially funded public institutions, in fact if not necessarily in legal fiction.[25]

The second salient characteristic of Canadian policy on higher education has been a remarkable respect for institutional autonomy. This has not always been by design. Most provinces have not tried seriously to intervene directly in the operations of universities. But when it has even appeared that they might, the reaction has usually been fierce. One such instance arose in Alberta in 1974 when the government considered adopting an omnibus statute incorporating all forms of technical, vocational and advanced education. The universities blocked the move to include them, successfully charging an invasion of academic freedom.[26] The upshot of this is weak provincial policy, at least in the sense of directing universities to support defined public policy objectives. The 1976 OECD review was particularly critical of this characteristic of Canadian education policy generally. Not much has changed since 1976:

> Canadian educational policy is ... clearly approaching a danger zone, in which more is at risk than simply the quantity of finance available. The virtues of an essentially pragmatic educational policy will be tested in the extreme. *If those responsible for educational policy are not promptly able to base the development of school and education on a firm goal-oriented footing, then they risk being pushed to the side in the general political competition for resources.*[27]

Until recently, the common instrument of choice in provincial-university relations was the intermediary or buffer agency. This constitutes the third characteristic of university policy in Canada. At one time, every province save Newfoundland, with its single university, boasted a buffer agency. Even Prince Edward Island created one, with responsibilities for the provincial university and the community college. It is perhaps equally significant that no province sought tighter control or coordination of its universities, either through

multi-campus provincial institutions or provincial boards of regents. Only Quebec tried a multi-campus university, and it remains a partial system.

Alberta was the first to abandon its buffer agency, shifting funding and regulatory responsibilities to a provincial department. More recently, Saskatchewan and British Columbia have followed suit. The multi-province Maritime Provinces Higher Education Commission, established in 1974 and serving Nova Scotia, New Brunswick and Prince Edward Island, faces an uncertain future with Nova Scotia seemingly determined to chart its own course. Ontario and Quebec have both reviewed the functions of their agencies, but decided to leave them intact. Manitoba is the only western province to retain a buffer agency. Governments do seem to be frustrated by their weak policy control of universities, and the development of targeted funding arrangements, to be discussed shortly, attests to this.

The fourth common characteristic takes us from provincial policy to institutional government. The overwhelming model of university government in Canada is bicameralism, with a lay governing board and an academic senate. This model was initially adapted from Scottish experience and incorporated in such early Canadian institutions as Queen's, McGill and Dalhousie. It acquired both its contemporary form and its almost universal application following the Duff-Berdahl study of university government in 1966.[28] Only two major universities, Laval and Toronto,[29] depart from this model, both having adopted unicameral governing structures (Laval from its origin in 1852, and Toronto in 1972). In a recent major overhaul of its government, Toronto moved a considerable distance back towards bicameralism.

Finally, the pressures of growth, restraint and a resultant insecurity have propelled many university faculty associations to engage in collective bargaining, many as certified unions. Faculty certification is prohibited by law in British Columbia, although faculty bargain collectively under voluntary arrangements at both UBC and Simon Fraser. Alberta is the only province to provide special legislation covering collective bargaining within universities. Significantly, it mandates a process of compulsory arbitration in the settlement of disputes. The other provinces have left universities to contend with private-sector labour legislation and, consequently, with adversarial bargaining processes and the ultimate sanction of the strike. At present, 29 of Canada's 49 provincially supported universities have certified unions. Proportionately more of the smaller institutions are unionized, while not all faculty members in unionized institutions are included in the bargaining unit. Thus, while the majority of universities have unions, less than half of all full-time faculty members are unionized.

Unionization and collective bargaining arose primarily as faculty responses to government policies of fiscal restraint. In turning to a consideration of the

financing of higher education, we return once again to the very heart of Canadian federalism.

FINANCING HIGHER EDUCATION

The shared-cost program, introduced in 1967 and involving federal transfers to the provinces equal to 50 percent of institutional operating expenditures, was terminated a decade later. In its place, the federal government introduced an unconditional block transfer. The arrangement extended to some health programs as well as higher education, and is known as Established Programs Financing (EPF). It initially employed a complex formula, but this was considerably simplified after 1982. Under the simplified version, EPF comprises two components: an additional one-time transfer of tax room (in relation to which equalization payments are made to qualifying provinces), and annual cash grants equal to the difference between the revenue attributed to the tax transfer and a per capita "entitlement." Each of these components has given rise to intense intergovernmental disagreement.

As far as the tax transfer is concerned, disagreement centres on whether the resultant revenue should be considered federal or provincial. The actual transfer of tax room was effected on two specific occasions (1967 and 1977) now long in the past, and tax revenues actually derived from this source are levied under provincial legislation. Yet, by law, the federal Secretary of State is required to report annually on federal and provincial expenditures on post-secondary education, including the imputed yield from the tax transfer *as a federal expenditure*.[30] This not only inflates the federal government's annual contribution, but it also implies that the whole transfer, including the proceeds of provincial taxation, is not unconditional but is somehow earmarked for post-secondary education. That, in turn, leads to charges that the provinces are diverting a portion of the transferred funds to other purposes.[31]

As far as the measure of provincial entitlements is concerned, controversy surrounds federal moves to reduce its financial commitment. The calculation of entitlements is based on the actual per capita federal transfer under the former shared-cost arrangement in 1975-76. Initially, this base figure was indexed to annual increases in provincial population and GNP. From 1983 to 1985 increases were capped at 6 percent and 5 percent respectively under a federal anti-inflation program. Then, in 1985, the formula was changed to GNP less 2 percent, and in 1989 to GNP less 3 percent. In 1990 indexation was suspended altogether for a period of two years.

The effect of these formula changes has been to program the withering away of EPF. Capping provincial entitlements almost certainly means that provincial revenues from the transferred tax room will increase proportionately faster, and federal cash grants will therefore diminish. Indeed, this is already happening.

As cash transfers diminish, it will become increasingly difficult to maintain the fiction that provincial tax revenues are somehow still federal expenditures.

If nothing else, the saga of EPF has provided Canadians with some juicy tidbits of intergovernmental obfuscation. The Council of Ministers of Education, Canada, representing the provinces, had this to say about the program: "EPF is a fiscal transfer to the provinces *in respect* of health and postsecondary education, not *for* health and *for* postsecondary education."[32]

Two federal officials, on the other hand, offered the following explanation:

> The provinces ... read more into the proposed unconditionability of the grants than perhaps the federal government intended. Where the federal government intended a circumscribed unconditionality, if one can use such a cumbersome phrase, it appears the provinces saw the new program as being more of a format for making federal contributions directly to their Consolidated Revenue Funds.[33]

Financing higher education, excepting research, is primarily a provincial responsibility. In this, provincial funding arrangements are themselves in transition. The common approach through the latter 1960s and early 1970s was based on an enrolment driven formula. Most provinces adopted a version of Ontario's scheme, by which each university's actual enrolment was first weighted by program, and operating grants were then calculated by multiplying the weighted enrolment by a specified unit value. By the latter 1970s, a combination of budgetary restraint and anticipated enrolment decline yielded various schemes for discounting enrolment growth. By the mid-1980s, another idea was finding its way into provincial grants. This was targeted or earmarked funding, by which provincial governments allocate grants to specific categories of expenditure. Quebec had always retained an element of targeting, particularly with respect to salaries and enrolment growth.[34] In 1987, Ontario introduced a thoroughgoing scheme of targeted funding, with grants allocated via separate policy envelopes. Nova Scotia introduced a similar scheme in 1990.

The actual levels of provincial funding pose a growing problem for universities. With some significant differences among the provinces, the overall level of operating support has almost exactly matched inflation over the past decade. Enrolment, meanwhile, which was supposed to decline after the postwar "baby boom" passed through the universities, has continued to increase, primarily due to increased participation rates for women. The result has been a reduction of real resources per student of some 20 percent over the ten-year period from 1976-77 to 1986-87.[35] Universities have had to absorb this decrease through productivity gains, measured by increasing student-faculty ratios.[36] This, in turn, has joined the controversy over the alleged diversion of EPF transfers to bolster charges that provincial governments are "underfunding" their universities.

Not surprisingly, provincial restraint has placed increasing pressure on student tuition fees as an alternative source of revenue. Tuition fees have been

increasing in recent years. In 1990-91, they ranged from as low as $820 in Quebec to $2,000 in British Columbia and the Maritimes, and contribute about 13 percent of total university operating revenue. In constant dollar terms, fees have still not reached the levels of the 1960s, after declining steadily through the 1970s and early 1980s.[37] In most cases, tuition fees are controlled by provincial governments, either directly through regulation, or indirectly through operating grants formulae. The exceptions are British Columbia and the Maritime provinces whose universities, consequently, charge the highest fees.[38]

The question of tuition fees leads directly to considerations of financial assistance for students. In fact, a number of policy proposals have surfaced recently calling for substantial increases in tuition coupled with additional student aid, the latter often proposed in the form of income contingent repayment schemes.[39]

Student assistance is currently built on the foundation of the Canada Student Loans Program (CSLP) and its provincial complements. This program, introduced in 1964, is a model of intergovernmental coordination. The federal government, acting within its constitutional jurisdiction over banking and credit, subsidizes student loans from commercial lenders and pays all interest charges until six months after the student graduates. Eligibility for a loan, however, is determined by provincial authorities. This permits the CSLP to be integrated with provincial student aid programs which typically require students to exhaust their eligibility for a federally-supported loan before qualifying for a provincial grant.

The CSLP is a model of federal-provincial coordination in at least two other respects as well. First, it has spawned regular meetings of officials from both orders of government, providing a forum for the sharing of information and discussion of administrative problems. Second, it has easily accommodated Quebec's distinctive interests. Quebec does not participate in the CSLP itself, but operates its own loan program and receives an annual fiscal transfer from the federal government equivalent to its share of expenditures under the CSLP. Quebec officials do, however, participate with their federal and provincial colleagues in intergovernmental consultations. It is but a short step from considerations of student assistance to questions about mobility and access.

STUDENT ACCESS AND MOBILITY

The standard measure of student access and participation is the proportion of the 18 to 21 age group actually enrolled in university.[40] By this measure, Canada's participation rates increased from 10.9 percent in 1972-73 to 15.0 percent in 1987-88. The most dramatic component of this was the increase in female participation. Over the same period, the rate for females increased from

9.8 percent to 16.4 percent. There are now more females than males in Canadian universities.

A recent Senate committee developed a different, but revealing measure of participation, the proportion of high school graduates who proceed to post-secondary education, either college or university. While noting a variety of problems associated with interprovincial comparisons involving different school and college structures,[41] they found that in 1985-86 29.3 percent of all high school graduates proceeded to university, while another 23.8 percent went on to college. This finding prompted the committee to conclude that "accessibility to college and university in its aggregate form is not a problem of national dimension."[42]

Questions of student mobility do raise issues and problems for public policy. Mobility can best be examined in two parts: international and interprovincial. On the international scene, the proportion of foreign students increased steadily until the early 1980s, when it began to decline. At the undergraduate level, the proportion of foreign students dropped from 5.8 percent in 1982-83 to 3.2 percent in 1987-88. At the masters level, the proportion dropped from 15.0 percent to 13.1 percent over the same period, and at the doctoral level it dropped from 27.7 percent to 24.1 percent.[43] This trend has apparently reversed itself since 1987-88. Enrolment of foreign students overall increased by 19 percent between 1987-88 and 1989-90.[44]

No doubt a significant factor in the decline was the imposition of differential fees for foreign students. This practice began in 1977 in Alberta and Ontario. Quebec and the Maritime provinces followed suit in 1979, and British Columbia's universities joined in 1984. In most cases, the foreign student fee is about double that for Canadians. Quebec has followed this course most vigorously, and by 1984-85 foreign fees were approximately 10 times the domestic fee.[45]

By contrast, there are no differential out-of-province fees in Canada. Students are free to attend university in another province, although provincial student aid programs may not apply if the same program is available within the student's home province. On the other hand, several provinces have entered into specific agreements to purchase places for their students in another province's universities. New Brunswick has such an agreement with Quebec, for example, with respect to French language professional programs not available in New Brunswick. The three Maritime provinces also have an agreement through the Maritime Provinces Higher Education Commission whereby each province pays to the others the net cost of students studying in another Maritime province.

Most Canadian students do, in fact, study in their home province. Only 8.4 percent of Canadian students were attending universities in another province in 1985-86.[46] There is considerable variation within this aggregate figure, and

some provinces do experience a substantial additional cost by virtue of the number of students from other provinces studying in their universities. The most extreme case is Nova Scotia, where fully 25 percent of all university students are from other provinces, while less than half that proportion of Nova Scotian students (11.3 percent) study in other provinces. One upshot of this is that while Nova Scotia ranks third highest among the ten provinces in the per-capita value of its university grants, it comes second lowest on a per-student basis.[47] A recent provincial royal commission seized on this as a major issue for the government, proposing that if other provinces were not willing to pay the cost of their net outmigration of students, Nova Scotia should move to impose quotas on inmigration.[48] To date, no action has been taken on either possibility.

PLANNING AND FUNDING OF RESEARCH

The federal government has been the principal patron of research since it established the National Research Council (NRC) in 1916. It extended its reach via the Canada Council, established in 1957, and the Medical Research Council, which was separated from the NRC in 1960. In 1977 the federal government undertook a major reorganization of its research support programs within the three current granting councils: the Medical Research Council (MRC), the Natural Sciences and Engineering Research Council (NSERC), and the Social Sciences and Humanities Research Council (SSHRC). These councils provide direct support to university researchers through a process of peer adjudicated applications. Research support through the councils amounted to $532 million in 1988-89, $306 million of it through NSERC, $177 million through MRC, and $49 million through SSHRC. Another $145 million was provided directly through government departments.[49]

Federal support of research gives rise to a problem in Canadian federalism. Federal grants cover only the direct costs of research, leaving to the provinces and the universities themselves responsibility for all overhead or indirect costs, not to mention the salaries of the principal investigators. A recent study by the Canadian Association of University Business Officers estimated that indirect costs, excluding the salaries of faculty members, were about equal to direct costs.[50] Canadian universities differ considerably in their degrees of research intensiveness. The problem resulting from the current arrangement is quite simply that the most research intensive institutions are penalized by a policy which fails to recognize these real, but indirect, costs.

Several provinces have moved recently to compensate for this deficiency. Ontario moved first, in 1987, by creating a policy envelope targeted to the indirect costs of research, distributing the amount provided in proportion to each university's share of federally sponsored research grants, and covering about 20 percent of the value of those grants. Quebec also introduced a similar

scheme in 1987, while Nova Scotia followed suit in 1990. This remains a serious deficiency in the federal research grant program, however.

Some provinces also provide direct support to university research. Alberta was a pioneer in this regard, while Quebec has the most extensive program, known as the Fonds pour la formation des chercheurs et l'aide à la recherche (le Fonds FCAR). Provincial programs tend to emphasize applied research, but one of the explicit objectives of the Quebec fund is to assist researchers in qualifying for federal grants.

Both orders of government have recently been preoccupied with attempts to draw university research more closely into support of economic development, particulary by fostering closer university-industry cooperation. The federal government, for example, announced a "matching funds" program in 1966, by which federal research funds via the granting councils would be increased in proportion to increased funding by industry. The program was not well received, and earned considerable criticism primarily because it failed to stimulate new, direct, connections between specific industries and universities.

The next step was taken by Ontario with the introduction of its centres of excellence program in 1986-87. The program was sponsored by a new agency, the Premier's Council, armed with a $1 billion fund intended "to steer Ontario into the forefront of economic leadership and technological innovation."[51] The unique aspect of Ontario's centres of excellence program was not just that it involved both industry and universities, but that it involved researchers from several universities in each "centre."[52]

This approach was politically very attractive, given Canada's decentralized university system and research effort. Not surprisingly, the federal government quickly adopted the Ontario idea, launching its own "Networks of Centres of Excellence" program in 1988. In this case, fourteen centres were initially approved, involving researchers from 30 universities, as well as a number of government agencies and at least two dozen private-sector firms, laboratories, or industrial associations. One year later, a fifteenth centre was approved, the only one in the social sciences (there were none in the humanities), involving ten universities and two private agencies.

Canada's research effort remains a very loosely coordinated one, if one can appropriately refer to coordination at all. This represents a major challenge to the federation, especially if research and technological development do hold the keys to avoiding economic marginalization in the face of intensifying competition in the global economy. This is but one of the issues currently facing government and universities in Canada.

CURRENT ISSUES

The most critical current issue is the crisis facing federalism itself. Higher education and research will certainly be affected by the course taken in response to this crisis. The key question here is what role the federal government will play. At present, the Established Programs Financing arrangement, with its unconditional fiscal transfers, is programmed to wither away. Will this mean the end of any significant federal presence apart from research, student loans, and a few specialized services?

If so, then a recent proposal by the Senate Committee on National Finance should perhaps receive closer attention than appears to have been given to it. This proposal called for a shift in federal resources from EPF to research, sufficient to permit the federal government to pay to universities the full costs, direct and indirect, of the research it sponsors. There would be an interprovincial redistribution resulting from such a shift, with Ontario and Quebec gaining at the relative expense of the other provinces, but this merely reflects the unequal distribution of sponsored research itself. The advantages of this approach would be considerable, especially insofar as research intensive universities would no longer be penalized in proportion to the success of their faculty members in obtaining research grants. In the process, federal and provincial roles would be clarified and an irritant in federal-provincial relations removed.

Reference to research leads directly to the closely related issue of university-industry relations in general. This is central to current government policies, both federal and provincial, vis-à-vis research. Closer ties with industry have also become a key objective for universities themselves, as they search for alternative sources of operating and capital funds. Canadian universities are still in the early stages of development in terms of both fundraising and collaborative research. Development has been rapid, however, and private fundraising has been growing significantly in recent years. We can expect to see further development in this area, even if its implications are far from clear.

Government encouragement of closer university ties with industry raises, in turn, the broader question of whether governments have sufficient capacity to steer universities as instruments of public policy. This is primarily a question for provincial governments, but it certainly has national implications as well. The question comes down to this: is a decentralized system of autonomous institutions, each exceedingly democratic in its management, the most appropriate structure in a situation where higher education and research hold important keys to global competitiveness?

The other side of this question is the capacity of universities to respond to public policy signals and directions. Insofar as higher education and research are likely to play an increasingly strategic role in terms of successful national

and regional economic competition, then the government and management of universities is likely to become an issue of increasing concern to public policy.

The choice here may be between tighter government regulation and direction of universities on the one hand, and fostering greater institutional competition on the other. The growing use of targeted funding suggests that provincial governments may be inclined to the second approach, for fiscal incentives are particularly appropriate to a competitive strategy. If so, this will place even greater importance on the capacity of universities themselves to plan and manage their resources and programs strategically. Universities, the institutional home of both higher education and research in Canada, are important both to public policy and federalism. That importance is only likely to increase.

NOTES

1. The initial draft of the proposed amendment was worked out at a government centre just outside Ottawa at Meech Lake, Quebec, on 30 April 1987.
2. Quebec was the first to ratify the Accord, setting the clock running on 23 June 1987. Newfoundland approved the Accord but after a change of government that approval was rescinded. The Accord was finally killed in the Manitoba legislature, when an aboriginal member, Elijah Harper, refused unanimous consent to waive public hearings.
3. For two complementary interpretations of the failure of the Accord, see Richard Simeon, "Why Did the Meech Lake Accord Fail?" and Pierre Fournier, "L'échec du Lac Meech: un point de vue québécois," in Ronald L. Watts and Douglas M. Brown (eds.), *Canada: The State of the Federation 1990* (Kingston, Ontario: Institute of Intergovernmental Relations, Queen's University, 1990).
4. K.C. Wheare, *Federal Government*, 4th ed (New York: Oxford University Press, 1964).
5. Canada does have a bicameral legislature, of course. However, the upper house, or Senate, is not truly representative, either of provinces or provincial governments. Its members are appointed by the prime minister of the day and serve until age 75. The original makeup of the Senate assigned 24 seats to each of three "regions": Ontario, Quebec, and the Maritimes. With the creation and admission of new provinces, this formula has been modified to add 24 seats for the four western provinces, plus 6 for Newfoundland and 2 for the Territories. The total membership, by province, is as follows: Ontario, 24; Quebec, 24; Nova Scotia and New Brunswick, 10 each; Alberta, British Columbia, Manitoba, Newfoundland, and Saskatchewan, 6 each; Prince Edward Island, 4; Yukon and Northwest Territories, 1 each. The only necessary association of a Senator with the province from which he or she is appointed is the requirement of the possession of property in that province with a value of at least $4,000.
6. Donald V. Smiley, *Canada in Question: Federalism in the Eighties*, 3rd ed., (Toronto: McGraw-Hill Ryerson, 1980), p. 91.

7. The Meech Lake proposals have been explored at length elsewhere. The major provisions would have: (1) incorporated an interpretive clause recognizing Quebec as a distinct society within Canada; (2) constitutionalized existing or future intergovernmental agreements respecting provincial participation in the concurrent legislative field of immigration; (3) recognized the right of the federal government to enter into shared-cost arrangements in areas of exclusive provincial jurisdiction, while allowing provinces to opt out of any such programs in the future, with reasonable compensation, provided they operated provincial programs compatible with the national objectives; (4) provided for provincial nomination, but continued federal appointment, of Supreme Court judges and Senators; (5) changed the amending formula to require ratification by the Parliament of Canada and the legislatures of all ten provinces for most matters of national significance; and (6) provided for annual constitutional conferences with the first items of business to be senate reform and jurisdiction over the fishery.
8. The first institution of higher learning was the Collège de Québec, established by the Jesuits in 1635. It was forced to close during the British seige of Quebec, but its teaching function was resumed in 1765 within the Séminaire de Québec, the forerunner of Laval University.
9. The five institutions were Laval, McGill, Toronto, Trinity, and Victoria (the last two were destined to become federated with the University of Toronto). Enrolment statistics are taken from Statistics Canada, *Historical Compendium of Education Statistics from Confederation to 1975* (Ottawa: Catalogue No. 81-568, 1978).
10. The division of legislative powers is found principally in sections 91 (federal) and 92 (provincial) of the *British North America Act, 1867*, now the *Constitution Act, 1867*. Education is dealt with in Section 93 which assigns exclusive jurisdiction to the provinces, but also grants limited remedial authority to the federal government in circumstances occasioned by provincial infringement on denominational rights to separate schools.
11. Canada, Royal Commission on Industrial Training and Technical Education, *Report of the Commissioners* (Ottawa: King's Printer, 1913), 4 volumes.
12. *Ibid.*, vol. 1, p. 26.
13. Canada, Royal Commission on National Development in the Arts, Letters and Sciences, *Report* (Ottawa: King's Printer, 1951).
14. The federal government had tried to finesse Quebec's objections in 1956 by having the grants administered by the National Conference of Canadian Universities, the predecessor of the Association of Universities and Colleges of Canada (AUCC). This, too, was rebuffed, and the funds were simply held in trust. The contracting out arrangement actually involved a transfer of one point of corporate income tax, with subsequent annual adjustments to ensure that the yield from the transfer was exactly equal to the value of the university grants that would have otherwise been paid to the universities.
15. Some other federal programs also affected universities, particularly in the training of health professionals.
16. John B. Macdonald et al, *The Role of the Federal Government in Support of Research in Canadian Universities* (Ottawa: Queen's Printer, 1969).

17. Both the federal and provincial governments have access to income taxation. A transfer of tax points essentially involves a reduction in federal income taxes in order that provinces may increase their taxes with no net increase in the overall rate. The revenue obtained by the less wealthy provinces is then brought up to the standard defined in the comprehensive federal-provincial equalization program. The administrative details of these arrangements have changed considerably over the years.

18. There was also a floor provision, applicable to the lowest spending provinces, of $15.00 per capita.

19. Nova Scotia had tried to consolidate its colleges into a University of Halifax, on the model of the University of London, in 1876. When that experiment failed after five years, the province cut off all financial support, a practice which remained more or less intact until 1963.

20. It should be noted that three of these (the Nova Scotia College of Agriculture, the Nova Scotia Teachers College, and King's College) operate in affiliation with another institution. A fourth (the Atlantic School of Theology) is a small theological college. The remaining nine are listed in the appendix.

21. This number includes Ryerson Polytechnical Institute, a special purpose institution offering technical and professional programs with special degree designations (Bachelor of Technology, Bachelor of Applied Arts, and Bachelor of Business Management). Ontario has a binary post-secondary system, with colleges of applied arts and technology (CAATs) complementing, but not feeding into, the universities. Ryerson is treated as part of the university sector. The Royal Military College brings the total number of university-level institutions to 17.

22. Formally known as an Order-in-Council, such an instrument constitutes delegated legislation and must be approved by the cabinet and signed by the representative of the crown, the lieutenant governor.

23. In addition to the original Royal Military College (RMC) in Kingston, Ontario, military colleges are located in Victoria, British Columbia (Royal Roads) and St. Jean, Quebec (Le Collège militaire royal). RMC remains the senior college, with degree programs in the other two limited to a few specialties.

24. The Ontario government annually publishes a set of tables comparing each province's performance in terms of various measures of expenditure per student, per capita, and as a proportion of provincial resources and total expenditures. It is a standard reference for provincial and university officials alike. See, for example, Ontario, *Interprovincial Comparisons of University Financing*, ninth report of the Tripartite Committee on Interprovincial Comparisons, 1989.

25. There are a few marginal private colleges. The only one of any significance is Trinity Western University in British Columbia with just under a thousand students. The three military colleges are publicly funded, but by the federal government.

26. See Ian Winchester, "Government Power and University Principles: An Analysis of the Battle for Academic Freedom in Alberta" in Ian Winchester (ed.), *The Independence of the University and the Funding of the State: Essays on Academic*

Freedom in Canada, the theme issue of *Interchange*, Informal Series 57 (Toronto: OISE Press, 1984).

27. OECD, *Reviews of National Policies for Education: Canada* (Paris, 1976), p. 102. Emphasis in the original.

28. Sir James Duff and Robert O. Berdahl, *University Government in Canada*. Report of a commission sponsored by the Canadian Association of University Teachers and the Association of Universities and Colleges of Canada (Toronto: University of Toronto Press, 1966). At the time the report was prepared, Sir James Duff was retired Vice-Chancellor of the University of Durham, and Robert Berdahl was a Political Science professor at San Francisco State College. The commission grew out of an intensifying campaign for greater faculty participation in university government. Its report strongly endorsed the bicameral model.

29. Athabaska University in Alberta is also governed under a unicameral structure, but it is a special purpose institution, concentrating on distance education.

30. The amounts involved in this dispute are substantial. In 1988-89, for example, the total EPF transfer attributed to post-secondary education amounted to $5.2 billion. Of this, fully $3 billion arose from the tax transfer and associated equalization. See Canada, Department of the Secretary of State, *Federal and Provincial Support to Post-Secondary Education in Canada: A Report to Parliament, 1988-89* (Ottawa: Minister of Supply and Services, 1990), p. 64.

31. The most forceful presentation of this argument can be found in a report prepared for the federal government by A.W. Johnson. He suggested that federal transfers under EPF had increased as a proportion of provincial operating grants from 69 percent in 1977-78 to 80 percent in 1984-85. A.W. Johnson, *Giving Greater Point and Purpose to the Federal Financing of Post-Secondary Education and Research in Canada*, a report prepared for the Secretary of State of Canada, 15 February 1985.

32. Council of Ministers of Education, Canada, *Principles for Interaction: Federal-Provincial Relations and Postsecondary Education in Canada*, October 1985, p. 1.

33. Magnus Gunther and Richard J. Van Loon, "Federal Contributions to Post-Secondary Education: Trends and Issues," in David M. Nowlan and Richard Bellaire (eds.), *Financing Canadian Universities: For Whom and By Whom?* (Toronto: Institute for Policy Analysis and Canadian Association of University Teachers, 1981), p. 162.

34. Quebec recognizes increased enrolment for grant purposes in two categories and at two rates, the higher rate applying to programs designated by the province as of high priority, and a lower rate applying to other programs.

35. In constant dollars, operating grants remained virtually constant at $1.8 billion. Enrolment increased from 496,000 to 631,000. The average grant per student, in consequence, dropped from $3,676 to $2,935.

36. Between 1977-78 and 1987-88, the average student-faculty ratio for all universities in Canada increased from 13.5:1 to 16:1.

37. Quebec presents the extreme case here. Fees were held unchanged at approximately $540 from 1968 to 1989. They have now been increased substantially, but are still well below the national average.

38. British Columbia had long had among the lowest fees in Canada. In the mid-1980s the provincial government imposed severe measures of restraint, actually cutting the grant to universities in absolute terms. Universities responded by raising tuition fees dramatically.
39. For a succinct description of the income contingent repayment scheme, see David Stager, *Accessibility and the Demand for University Education*, discussion paper prepared for the Commission on the Future Development of the Universities of Ontario (Bovey Commission), 1984, pp. 30-34.
40. Most analysts agree that this measure is deficient in the sense that a growing proportion of students do not fall within this age range. However, as the AUCC recently noted, "Selection of a different or wider age spread ... would not change the basic trends, only the absolute values for the levels of participation." AUCC, *Trends: The Canadian University in Profile* (Ottawa, 1990), p. 42. The figures in this paragraph are taken from this publication.
41. There are a wide range of college systems in Canada, all of which go under the generic title of "community colleges." These range from the Quebec CEGEP which combine pre-university and technical programs and offer the only route to university, through the colleges in British Columbia and Alberta which offer university-level programs as well as technical training, to colleges in other provinces which do not permit subsequent transfer to university.
42. Canada, Senate, Standing Committee on National Finance, *Federal Policy on Post-Secondary Education* (Ottawa: Minister of Supply and Services, 1987), p. 41.
43. AUCC, *Trends*, p. 34. There are wide variations within these proportions among programs and disciplines.
44. Canada, Department of Secretary of State, *Profile of Higher Education in Canada: 1990 Edition* (Ottawa: Minister of Supply and Services, 1991), p. 7.
45. Statistics Canada, *Tuition and Living Accommodation Costs in Canadian Universities*, Catalogue 81-219, Annual.
46. Statistics Canada, *Universities: Enrolment and Degrees*. Catalogue 81-204, 1985.
47. Ontario, *Interprovincial Comparisons of University Financing*, 1989, pp. 5-6.
48. Nova Scotia, *Report of the Royal Commission on Post-Secondary Education* (Halifax: Queen's Printer, 1985), pp. 128-29.
49. Canada, Department of the Secretary of State, *Federal and Provincial Support to Post-Secondary Education in Canada*, 1988-89, p. 70.
50. Canadian Association of University Business Officers, *Report of the Study on the Costs of University Research*, August 1982.
51. Ontario, Parliament, *Debates and Proceedings*, 22 April 1986, p. 7.
52. Of the seven centres, only two involved a single university, while three centres included four universities, one centre involved five universities, and one centre included researchers from six universities.

APPENDIX
Canadian Universities, by Province

British Columbia

University of British Columbia (Vancouver)
Royal Roads Military College (Victoria)
Simon Fraser University (Burnaby)
Trinity Western University (Langley)
University of Victoria

Alberta

University of Alberta (Edmonton)
Athabaska University
University of Calgary
University of Lethbridge

Saskatchewan

University of Regina
University of Saskatchewan (Saskatoon)

Manitoba

Brandon University
University of Manitoba (Winnipeg)
University of Winnipeg

Ontario

Brock University (St. Catharines)
Carleton University (Ottawa)
University of Guelph
Lakehead University (Thunder Bay)
Laurentian University (Sudbury)
McMaster University (Hamilton)
University of Ottawa
Queen's University (Kingston)
Royal Military College (Kingston)
Ryerson Polytechnical Institute (Toronto)
University of Toronto
Trent University (Peterborough)
University of Waterloo
University of Western Ontario (London)
Wilfrid Laurier University (Waterloo)
University of Windsor
York University (North York)

APPENDIX (continued)

Quebec

Bishop's University (Lennoxville)
Collège militaire royal de Saint-Jean
Concordia University (Montreal)
Université Laval (Quebec)
McGill University (Montreal)
Université de Montréal
Université du Québec: en Abitibi-Témiscamingue
à Chicoutimi
à Hull
à Montréal
à Rimouski
à Trois-Rivières
Université de Sherbrooke

New Brunswick

Université de Moncton
Mount Allison University (Sackville)
University of New Brunswick (Fredericton)
St. Thomas University (Fredericton)

Nova Scotia

Acadia University (Wolfville)
University College of Cape Breton (Sydney)
Dalhousie University (Halifax)
Mount Saint Vincent University (Halifax)
Nova Scotia College of Art and Design (Halifax)
Université Sainte-Anne (Church Point)
St. Francis-Xavier University (Antigonish)
St. Mary's University (Halifax)
Technical University of Nova Scotia (Halifax)

Prince Edward Island

University of Prince Edward Island (Charlottetown)

Newfoundland

Memorial University of Newfoundland (St. John's)

Origins and Development of Federalism in American Higher Education

Martin Trow

INTRODUCTION

Like Germany and Canada, but unlike most other countries in the world, the United States places the primary responsibility for education (including higher education) on the states rather than on the federal government. In the United States this reflects the deep suspicion of central government reflected in the separation of powers in the Constitution. Moreover, the Tenth Amendment of the Constitution says simply: "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively or to the people." Provision of education is one of these powers.

In Canada, education at all levels is also the constitutional responsibility of the provinces. There are, however, significant differences between the American and the Canadian arrangements for higher education: for one thing, Canada has a much smaller private sector; for another, Canadian higher education, while the responsibility of the provinces, is largely funded by federal government money passed through the provinces. Both of these differences bear on the wider diversity of sources of support for American higher education.

Federalism in the United States can be seen as the major determinant of the governance and finance of the nation's system of higher education. American colleges and universities get support not only from federal, state and local governments, but from many private sources such as churches, business firms, foundations, alumni and other individuals, from students in the form of tuition and fees for room, board and health services, and from many other clients of its services, for example, patients in its hospitals. The concept of federalism focuses attention on the role of regional governments — in the case of American higher education, usually the states, though sometimes counties and cities are

also relevant — and on their relation to the central authority of the national government. And federalism is also concerned with the role of private, non-governmental sources of support, which are especially important for many of America's leading academic institutions, both "public" and "private." Thus, "federalism" in American higher education cannot be separated from the broader issue of how American higher education developed in the curious and unique ways that is has — so large, untidy, uncoordinated from the centre, without national (or even state) standards for the admission of students, the appointment of academic staff, or the awarding of degrees. For that reason, if no other, a discussion of federalism must be rooted in reflections on the nature and emergence of American higher education as a whole.

ASPECTS OF FEDERALISM IN CONTEMPORARY AMERICAN HIGHER EDUCATION

The radical decentralization of control of American higher education (of which federalism is one aspect) is both required by and contributes to its size and diversity. Total enrolments in 1990 were just short of 14 million, in some 3,500 institutions. Of these students, some 12.1 million were undergraduates, and 1.9 million attended graduate or professional schools. Some 78 percent were enrolled in "public" institutions, though it is important to stress that many public institutions receive funds from private sources, and almost all "private" institutions are aided by public funds, through research support, student aid, or both.

Of the total enrolment of nearly 14 million, some 5.4 million, or over a third, were enrolled in two-year colleges, almost all of them public institutions. Over 7.9 million, or 56 percent, were classified as "full-time students" in that they met the requirements for full-time status as reported by the institutions, though many of these were also working part-time, while 6 million students were formally studying part-time.[1] Indeed, the proportion of part-time students has been growing in recent years, as have the numbers and proportions of older students, and students from historically under-represented minorities, largely Blacks and Hispanics. Students of non-traditional age — that is, 25 years and older — accounted for well over two-fifths of American college students, and racial and ethnic minorities nearly 20 percent. Women comprised 54 percent of the total enrolment.[2]

The size and diversity of the student body in American colleges and universities reflects the numbers and diversity of the institutions in which they are enrolled.[3] No central law or authority governs or coordinates American higher education. The nearly 2,000 private institutions are governed by lay boards which appoint their own members; the 1,560 public institutions (including nearly a thousand public community colleges) are "accountable" in varying

degrees to state or local authorities, but usually have a lay board of trustees as a buffer against direct state management, preserving a high if variable measure of institutional autonomy.

Differences in the forms of governance and finance among the public institutions are very large, both between and within states. For example, the Universities of Michigan and California are able to call on state constitutional provisions protecting their autonomy against political intrusion; it is perhaps not coincidental that they are also the two most distinguished public universities in the country. Moreover, over the years both have used their freedom to diversify their sources of support; currently only 30 percent of the operating expenses of the University of California come from state government, and the proportion in the University of Michigan is even smaller — closer to 20 percent. (They are perhaps more accurately "state-aided" than "state" universities.) Other state institutions by contrast suffer constant state interference in their management and policies, interference facilitated by line-item budgeting, close state control over expenditures and limited discretionary funds.

But while an observer can see contrasting patterns in the legal and formal organizational arrangements from state to state, actual relationships between public institutions and state authorities vary also by historical tradition, the strength and character of institutional leaders, and the values and sentiments of governors and key legislators. Variations in the autonomy of public institutions can be seen not only between states, but between sectors of higher education within states, and even between institutions within the same state sector. Examples of the latter are the differences between the University of California (UC), on its nine campuses, and the 20-campus system of the California State University (CSU), defined as primarily undergraduate institutions, though also offering masters degrees. CSU is currently without the power to award the doctoral degree (except rarely, when done in conjunction with a campus of the University of California), and therefore does little funded research. The California State University also does not have the University of California's constitutional protection, and is funded on a line-item basis. Nevertheless, at least one of its campuses — CSU San Diego — has encouraged its faculty to do research and to write proposals for outside funding; in these respects, and in its success in gaining such support, it begins to resemble a campus of the University of California rather than other institutions in its own sector.

Diverse Sources of Funding

The diversity of funding is at the heart of the diversity of character and function of American higher education. American colleges and universities get support not only from national, state, and local governments, but from many private sources such as churches, business firms, foundations, alumni and other

individuals; from students in the form of tuition and fees for room, board, and health services; and from many other clients of their services, as for example, their hospitals' patients. In 1988-89 expenditures of all kinds on American colleges and universities were estimated to be over $131 billion* — an increase in current dollars of 70 percent, and in constant dollars of 31 percent, over 1981-82, and represented roughly 2.7 percent of the Gross National Product.[4] Government at all levels together provides less than half of all current revenues for American higher education, currently about 42 percent. The federal government itself provides only about 13 percent of the support for higher education, chiefly in the form of grants and contracts for research and development in the universities. That figure includes grants to students but excludes the federal government's loans and loan subsidies. (If it included those, the federal contribution would be closer to 20 percent, and the students' contribution reduced by the same amount.) State and local governments (mostly state) provide a third of all support for higher education.

Students themselves (and their families) provide about a quarter of the funds for higher education, and the institutions themselves about 27 percent from their own endowments and from other enterprises they operate and and services they provide, such as hospitals. Another 6 percent is provided by gifts, grants and contracts from private individuals, foundations and business firms. So in brief, students provide about a quarter of the revenues for higher education (perhaps half of which comes from student aid from various sources); the institutions provide about a third from their own endowments, gifts and enterprises, and the rest comes from "government" — that is, cities and counties, the 50 state governments, and the many federal sources and agencies whose expenditures are not coordinated by any policy or office.[5]

These proportions, of course, differ between American "public" and "private" colleges and universities, though it must be stressed that all American colleges and universities are supported by a mixture of public and private funds. For example, while public colleges and universities currently get about half their operating budgets from their state governments, private institutions get less than 2 percent from state sources. But the private colleges get a slightly larger proportion of their support funds from the federal government than do public institutions — 17 percent as compared with 11 percent. The other big difference lies in the importance of student tuition payments that go directly to the institution: these account for less than 15 percent of the revenues of public institutions, but nearly 40 percent of the support for private institutions.[6] And those proportions differ sharply among finer categories of colleges and universities: for example, as between research universities and four-year

* Note: Unless otherwise noted, all dollar ($) amounts shown in this chapter are for United States dollars.

colleges in both public and private categories in 1989-90 the University of California got roughly $1.1 billion in research grants and contracts, of which $614 million came from agencies of the federal government. The balance came from other public and private sources. Most of the money went directly to individual researchers and faculty members on UC's nine campuses, out of a total budget of $6 billion. (An additional $200 million is provided by the federal government for "overhead," i.e., the indirect costs associated with the research. This sum is split roughly half and half between the state government, where it goes into the General Fund, and the University, for whom it is an administrative and discretionary fund).

Diverse Sources of Student Aid

In 1989-90, total student aid from all sources was running at over $27 billion a year, 62 percent higher in current dollars, and 10 percent higher in real terms, than in 1980-81. Of this sum, nearly $2 billion came from state grant programs, and about $6 billion from the resources of the institutions themselves, such as gifts and endowment funds. The remainder, over $20 billion, came from federal sources in a complex combination of student grants, loans and subsidized work-study programs. Of that large sum nearly two-thirds, or $12.6 billion, was distributed through various loan programs (which are not included in the estimates of federal support cited above). As the total amount of federal aid has grown, the proportion taking the form of loans has grown: in 1975-76, three quarters of federal student aid was awarded in the form of grants, but by 1989-90 the share of federal student aid in the form of grants had fallen to about a third.[7]

In 1986-87 nearly half (46 percent) of all undergraduates received some form of financial aid; over a third (35 percent) were receiving federal aid.[8] In real terms, student support from all sources increased by about 10 percent over 1980-81, a little less than the increase in total enrolments (up about 12 percent over that period), but probably close to the increase in full-time equivalent" enrolments. Aid from federally supported programs decreased by about 3 percent from 1980-81 when adjusted for inflation. But large increases in student aid at the state and institutional levels (which now comprise over a quarter of the total student aid from all sources) have more than offset the drop in federal funds for student aid. State student grant programs grew by 52 percent, and aid awarded directly by the institutions grew by 90 percent, both in real terms, in the decade of the 1980s.[9] In this area, as in others, the states and the institutions (and their constituencies) are providing more of the support for higher education, though the shift is slow, and is not reflected in absolute declines in the federal commitment.

Looking at patterns of state support over the past decade, we see that many states cut their support for public colleges and universities during the severe

recession of 1980-82, but that thereafter the levels of state support tended to rise about as fast as the economic recovery and rising revenues permitted. State tax funds for the operation of higher education (this does not include capital costs) were nearly $31 billion for 1984-85, up 19 percent over 1983-84.[10] By 1990 the states were spending nearly $41 billion on operating expenses for higher education, up 23 percent (adjusted for inflation) over 1980-81. The current recession is causing a decline, not in state spending on higher education, but in the rate of growth of state spending. Spending on higher education by the states in 1990-91 was 11.6 percent higher than two years earlier; but this was the lowest rate of increase in state support for higher education in 30 years.[11]

This brief overview is intended to put into perspective the federal role in American higher education. How the states have used their primacy in this area of public policy varies enormously from one state and region to another. Similarly, how the states support higher education varies enormously from one region of the country to another, compared with regional differences in European countries. For example, in the New England and North Central states, private colleges and universities developed early in our history, and have tended to resist the competition of big publicly supported institutions. While public institutions have grown there as elsewhere in recent decades, the effects of that heritage can still be seen, for example, in Massachusetts and New York, where great universities like Harvard, MIT, Columbia, Cornell, and a host of other vigorous private institutions overshadow and overpower the public colleges and universities in those states. By contrast, in some western states there is little private higher education at all; public institutions, such as land-grant universities and public community colleges, have a virtual monopoly on the provision of post-secondary education within their borders. These differences are clearly evident in terms of per-capita state support. For example, in 1990 per-capita appropriations by the 50 states for higher education averaged $159, but ranged from $312 in Alaska to $67 in New Hampshire — a difference of nearly five to one. If those two extreme states are set aside, a comparison of the second with the forty-ninth — Hawaii and Vermont — gives a ratio of two and a half to one. A slightly different index — state appropriations per $1,000 of state income (which attempts to control for state wealth, giving thus a measure of "effort") — shows similar results: again a ratio of 5:1, though the extreme states on this measure are Wyoming ($18 per $1,000) and New Hampshire ($3.50 per $1,000).[12]

As a consequence of its system of educational federalism, the United States is evidently prepared to sustain differences (or inequalities) in support for higher education among the several states of this order of magnitude. This is perhaps one of the most significant and least remarked differences between American and European systems. Any effort to achieve or approximate equality

in the provision of public services between and among states or regions would require considerable direct intervention by the central government. The federal government has been prepared to intervene strongly in education to defend the civil rights of students and faculty, mostly notably in connection with the potential for discrimination on the basis of race or gender, and it can also modestly reduce inequalities among states by providing federal funds directly to students and to researchers. But with a few exceptions, the federal government does not try to stimulate state spending on higher education in order to compensate for differences in state wealth or effort, or give the states unrestricted funds for support of higher education.

The most important historical exception was the contribution of the federal government to the states through the first Morrill Act, which clearly aimed at stimulating state spending for agricultural and technical education, and the introduction of the principle of requiring the states to provide "matching dollars" (to some ratio) for specific purposes, most notably in the second Morrill Act.[13] After World War II, President Truman's Commission on Higher Education recommended that the federal government undertake a massive program of "general support of institutions of higher education," precisely by channeling federal funds to the states "on an equalization basis," and limiting the recipients to public colleges and universities.[14] The defeat of this effort to equalize higher education across the states, and the further defeat in the *Education Amendments* of 1972 of efforts to channel federal funding directly to the institutions through unrestricted grants has established federal policy for the present and foreseeable future. The current reluctance (or constitutional inability) of the federal government to intervene directly to affect state policy towards higher education outside the realm of the protection of civil rights and liberties underlies the considerable power of the states to organize and fund their systems of higher education relatively free of the levelling hand of the federal government. The rather stronger egalitarian instincts of Europeans and Canadians lead them to view that "freedom" with some skepticism and on the whole critically.

The states also differ markedly among themselves in the way they organize, govern, or "coordinate" their systems of higher education. In some states, such as Massachusetts and Utah, coordinating councils are very powerful, serving as consolidated boards which govern the whole of the public sector of post-secondary education in the state. In California, the Postsecondary Education Commission has relatively little formal power, serving chiefly as a fact-gathering advisory body to state government, and is itself largely governed by representatives of the public institutions it is "coordinating." In still other states, like Vermont and Delaware, there are no statutory coordinating bodies at all.[15]

This brief overview of the diversity of funding, student aid, and state support has sought to put into perspective the federal role in American higher education — one which is substantial in overall size, but much smaller in its

direct influence or power over the system than is the role of several states. Since its founding, the federal government has come to play a role, and often a dominant role, in many areas of social and economic life in ways its founders never anticipated. Nevertheless, its role in American higher education is limited primarily to its support for research and student aid.

In the following pages I want to explore the roots of the unique character of American higher education in the colonial experience, and then explain the impact of the American Revolution on the attitudes and arrangements for higher education that came out of the colonial period, and finally trace the emergence after the Revolution of a national policy towards higher education — a policy nowhere articulated as such, but defined by a series of events over a century and a half that have shaped today's federal relations with institutions of higher education.

THE ROOTS OF AMERICAN FEDERALISM IN THE COLONIAL EXPERIENCE[16]

Despite all the changes and transformations of state, society and economy in modern times, the American system of higher education has its roots in the colonial period, when it developed characteristics distinguishable from all other systems of higher education in the world, notably in its governance patterns, marked by a strong president and lay governing board, its extraordinary diversity of forms and functions, and its marked responsiveness to forces in society as well as in state and church. In one other respect the colonial colleges are familiar to us, and that is in the importance attached to them by the societies and governments of the colonies. At a time when most European universities were not really central to the vitality of their societies, and were more or less preoccupied with the preparation of theologians and divines serving an established church, or with defining the virtues and polishing the accomplishments of a ruling elite, the seventeenth- and eighteenth-century colonial colleges in America were regarded by their founders and supporters as forces for survival in a hostile environment. They were seen as crucial, indeed indispensable, instruments for staving off the threat of reversion to barbarism, the threatened decline into the savagery of the surrounding forest and its Indian inhabitants.[17] The colleges also played a familiar role for these early Calvinists of maintaining a learned ministry and a literate laity. Moreover, in the young colonies as on the later frontier, civilization and its institutions could never be assumed to be inherited; it had always to be created and re-created. For this purpose, learning and learned persons and the institutions that engendered them were needed.

The colonial colleges were founded as public bodies. They were established and then chartered by a public authority and were supported in part by public funds, in part by private gifts and endowments, in part by student fees. The

mixing of public and private support, functions and authority has persisted as a central characteristic of American higher education to this day, blurring the distinction between public and private colleges and universities. Americans have tended to regard all their higher education institutions as having a public dimension, and they also allowed for a private dimension in their public institutions. As Jurgen Herbst argues, one cannot see the colonial colleges as either "public" or "private" institutions, but as "provincial," stressing their function of service to their sponsoring and chartering colony, rather than to their source of support or authority.[18] While the distinction between "public" and "private" emerged with a certain clarity in the nineteenth century, and especially after the Civil War, it is still more appropriate to see the broad spectrum of American colleges and universities as lying along a continuum from fully public to nearly purely private.

Both the geography of the eastern seaboard and the accidents of settlement created a series of distinct and largely self-governing colonies, each tied to metropolitan London through a charter and governor, yet separate from one another in character, social structure, and forms of governance. That, in turn, meant that when colonial colleges were established they differed from one another in their origins, links to colonial government and denominational ties.[19] The eight colonial colleges differed widely among themselves. In a sense, these early and most prestigious American colleges, the nurseries of so many of the revolutionary leaders, legitimated diversity. But similarities also existed. The colonial colleges had to be created in the absence of a body of learned men. In the new world no guild of scholars existed, no body of learned men who could take the governance of a college into its own hands. The very survival of the new institutions in the absence of buildings, an assured income, or a guild of scholars required a higher and more continuous level of governmental interest and involvement in institutions that had become much too important for the colonies to be allowed to wither or die. Moreover, a concern for doctrinal orthodoxy, especially in the seventeenth century, provided further grounds for public authorities to create governance machinery in which its own representatives were visible, or held a final veto and continuing "visitorial" and supervisory powers. The medieval idea of a university as an autonomous corporation composed of masters and scholars was certainly present in the minds of the founders of colonial colleges, but the actual circumstances of colonial life forced a drastic modification in the application of this inheritance.

Until the Revolution there was no central government on the American continent with broad jurisdiction over them all, and thus no governmental body that would accept responsibility for ordering and governing an emerging class of institutions in similar ways, in response to a common law or governmental policy. Indeed, even after a federal government emerged, it explicitly renounced its authority over education, including higher education, delegating that power

to the constituent states. That self-denying ordinance was reinforced during the early years of the Republic when an attempt to create a national university in the capital was defeated, thus preventing what might well have introduced formal and informal constraints on the promiscuous creation of new colleges and universities after the Revolution.[20] So the colonies had the experience, before the Revolution, of having created a group of colleges or "university colleges," similar in certain respects but differing in others. They also had the experience of having created these institutions of higher education at the initiative or with the encouragement of public authorities and powerful private constituencies. Such support stands in marked contrast to the conspicuous lack of such encouragement, and indeed the stubborn resistance, or deeply divided responses, by political and ecclesiastical authorities in England to the creation of new institutions of higher education, especially and particularly those originating outside the Establishment in the decades before 1830. As noted above, the many dissenting academies created in England in the second half of the eighteenth century never had the encouragement of central or local government, and their failure to be fully acknowledged or gain a charter and the right to grant degrees were among the factors leading them to short lives and a dead end, of no real use or inspiration to those who created the new English colleges and universities in the next century. By contrast, America's colonial experience provided a training in the arts of establishing institutions of higher education. And the skills and attitudes necessary for the creation of new colleges that were gained in the colonial period, along with the models of governance provided by the older institutions, led (in a more favourable environment than England provided) directly to the proliferation of colleges and universities after the Revolution: 16 more between 1776 and 1800 that have survived to the present day, and literally hundreds over the next half century, many of which did not.[21]

At Harvard, for example, the charter of 1650 "exemplified a carefully wrought compromise between a medieval tradition of corporate autonomy and a modern concern for territorial authorities over all matters of state and religion. The former was preserved, even though weakly, in the Corporation; the latter was institutionalized in the Board of Overseers."[22] Other colonies as well, for reasons similar to those of Massachusetts, carefully circumscribed the powers of the corporate universities, each making sure that its governors and legislatures retained ultimate power over the college through the composition of its external Board, or through the reserve powers of the colonial government as "visitor." Even in Connecticut, where Yale's trustees were all Congregational ministers, the charter that incorporated the trustees as the President and Fellows of Yale College preserved to the colonial Court the right " 'as often as required' to inspect the college's laws, rules, and ordinances, and to repeal or disallow them 'when they shall think proper.'"[23] And in colonial America, these reserve powers were in fact employed from time to time. The charter, Herbst notes,

"thus upheld the ultimate authority of the Court over the college, but also guaranteed the school's autonomy within specific limits."[24]

Indeed, only Harvard and William and Mary College (in Massachusetts and Virginia), the only two seventeenth-century foundations, were established with a two-board government, one representing the institution or corporation, the other the external trustees. And in both of these "the governmental practice ... soon lost its distinctiveness and came to resemble that of the one-board colleges. American colleges were to be ruled by powerful and respected citizens, who would govern them for their own and their children's benefit."[25] Ironically, the nearest American colleges and universities ever came to recreating the first, or corporate board, was when they finally were able to gather together a guild of learned men who could command respect and gain a measure of professional authority. It was not until after the turn of the twentieth century that academic senates became significant parts of the governance machinery of American colleges and universities, and then only in the most prestigious institutions employing scholars who were able to use the academic marketplace to compel respect and attention from presidents and boards concerned with the status and distinction of their institutions. The relative weakness of the academic profession in the United States, as compared with its strength in the United Kingdom, especially in Oxbridge, has had large consequences for the diverging development of the two systems.[26]

With the exception of New Jersey which, because of religious diversity occurring at the end of the colonial period, chartered two colleges, each colony granted a monopoly position to its college. In this respect, each colony behaved towards its college as England behaved towards Oxford and Cambridge, and Scotland towards its universities, granting their colleges the power to award degrees within their respective province. American colonial governments were attempting to prevent or inhibit the appearance of rival and competitive institutions, in much the same way that the government in England had prevented the dissenting academies from widening the educational market in the eighteenth century. Consequently (and other factors were doubtless involved), in England the dissenting academies never emerged as serious competitive degree-granting institutions, and were destined to failure and, with one or two exceptions, to eventual extinction.[27] But their existence — and relevance — was noted in the colonies, and reference was made to them, during a dispute over sectarian issues at Yale in the 1750s, as better models than the ancient universities.[28] As models they were even more relevant to the proliferation of American colleges on the frontier between the Revolution and the Civil War, with the significant difference that the American colleges were encouraged and sometimes even modestly supported by public authorities.

College charters expressly reserved for colonial governments a continuing role in the governance of colleges, placing colonial officers directly on boards

of trustees, or assigning to the Courts and legislatures the power of review. For example, the 1766 charter of Queen's College (later to become Rutgers) included among its lay trustees the governor, council president, chief justice and attorney general of the province of New Jersey.[29] In the 1748 charter for the College of New Jersey (later to become Princeton), the province placed its governor on the board as its presiding officer.[30]

All the colonial colleges were provided with public funds of various kinds, though in varying amounts and degrees of consistency. Some received a flat sum or subsidy to make up an annual shortfall in operating expenses or salaries, others assistance in the construction and maintenance of buildings. The Assembly of Virginia provided the College of William and Mary with a percentage of the duties collected on furs, skins and imported liquor.[31] These subventions reflected an organic connection between the colony and "its" college, and the colonies were not reluctant to use the power of the purse as a constraint on colleges when they were alleged to have carried their autonomy too far. The Connecticut legislature in 1755 refused its annual grant of £100 to Yale because of a sectarian dispute with the College's president.[32]

In sum, the power of colonial governments over their colleges was derived from three fundamental sources: the power to give or withhold a charter; the continuing powers reserved for government within the charter; and the power of the public purse. As Bernard Bailyn has explained the situation, "The autonomy that comes from an independent, reliable, self-perpetuating income was everywhere lacking. The economic basis of self-direction in education failed to develop."[33]

EFFECTS OF THE AMERICAN REVOLUTION

Before 1776 the colonies displayed a stronger (or at least as strong a connection) between state and college as was apparent in the mother country, but the relationship changed drastically after the Declaration of Independence. In a formal sense, the Revolution transformed colonial governments into state governments and superimposed a national confederacy and then a federal government on top of them. However, at the same time the Revolution weakened all agencies of government by stressing the roots of the new nation in popular sovereignty, the subordination of the government to "the people," and the primacy of individual and group freedom and initiative. "The individual replaced the state as the unit of politics," writes Robert H. Wiebe, "and the Constitution and *Bill of Rights* confirmed this Copernican revolution in authority." And "unlike the eighteenth-century venture in building a society from the top down," American society after the Revolution "originated in a multitude of everyday needs that responded to the long lines of settlement and enterprise, not the imperatives of union."[34]

At least as important as the new conception of the relation of the citizen to state that emerged from independence was the opening of the frontier beyond the Alleghenies, which gave many Americans a chance to walk away from the settled and European states that succeeded the old colonies, requiring them to create, indeed invent, new forms of self-government on the frontier.[35] Among the institutions of the frontier were new colleges, resembling the colonial colleges in some ways but differing in others, and linking the recently-opened territories to the original culture of the Atlantic. In the 25 years after the Declaration of Independence, of the 16 colleges that were established (and have survived), no less than 14 were created on the frontier.[36] After 1800, the floodgates of education opened, and hundreds of institutions were established in both old states and new territories. Most of them were small and malnourished, and many collapsed within a few years of their founding. The reason for this explosion of educational activity was a change in the three conditions that had hitherto characterized government-college relations in the colonial period: restrictive chartering, direct interest by government in the administration of colleges, and public support of higher education.

The new states, both those which succeeded the old colonies and those carved out of the new lands in the west, did not give a monopoly to any single state college or university, reflecting the quite different relationship of state and societal institutions that emerged from the Revolution. The states granted charters much more readily than had colonies before the Revolution, and on decidedly different terms. Herbst tells of efforts in 1762 by Congregationalists dissatisfied with the liberal Unitarian tendencies of Harvard to create a Queens College in western Massachusetts. The nation's oldest college and its Overseers opposed the proposal and prevailed, using the argument that Harvard "was a provincial monopoly, funded and supported by the General Court for reasons of state and properly the College of the Government."[37] The principle that reserved a monopoly to the "College of the Government," with its attendant rights and privileges, had to be overthrown for American higher education to break out of the restrictive chartering that had been historical practice. What is astonishing is not that it was subsequently overthrown, but that it was done with such ease as to scarcely occasion comment.

The ease with which new colleges were granted charters after the Revolution, and especially after the turn of the century, was both symbol and instrument of the triumph of society over the state that the Revolution had achieved.[38] Despite the efforts of the Federalists, central government itself over time came not to be a dominant institution (alongside the churches), but merely one player in social life, and not a very important one at that. By the fifth decade of the nineteenth century, the national government was scarcely visible in American life: no national bank, no military worth mentioning, no taxes that a growing majority of citizens could remember paying its officials.[39] And even state

governments, closer to the people and with constitutional responsibility for education, confined their role to serving as the instruments of groups and interests in the society at large, including groups that wanted to create colleges for a whole variety of motives: cultural, religious, and mercenary, in all weights and combinations.

LONG-TERM FEDERAL POLICY TOWARDS HIGHER EDUCATION AFTER THE REVOLUTION

The colonial period taught Americans how to create colleges, and gave us diversity among them. The Revolution gave us freedom from central state power, especially from the power of government, both federal and state, to prevent the creation of independent colleges and universities. But these new freedoms were reinforced and given substance through a further set of decisions that together have defined federal policy towards higher education from the founding of the republic to the present. This policy, never articulated but defined by those decisions, has been to encourage the provision of higher education, broaden access to college and university to ever wider sectors of the population, apply the contribution of higher education to the practical work of society as well as to learning and scholarship — and to do all this without directly impinging on the autonomy of the institutions or on the constitutional responsibility for higher education reposing in the states. This policy paradoxically encouraged an active federal presence in higher education, yet had the effect of driving power progressively further away from Washington, DC, down to the individual states, the institutions, and their individual members, students, and faculty. It became a kind of continuing self-denying ordinance by which the federal government has acted to facilitate decisions made by others, rather than forcing its own decisions on the states, institutions, or members.

Five of these decisions since the Revolution were so significant to the development of American higher education as to warrant separate discussion:

1. The failure of George Washington and his immediate presidential successors to establish a national university in the District of Columbia.
2. The Supreme Court's decision of 1819 in the Dartmouth College case.
3. The Morrill, or Land Grant, Acts of 1862 and 1890, and the Hatch Act of 1887.
4. The *Servicemen's Readjustment Act* of 1944, better known as the GI Bill.
5. The *Higher Education Amendments* of 1972, which created the broad spectrum programs of student aid that we have inherited, much amended and expanded.

The University of the United States

Consider first the failure to establish a national university. The defeat of a proposal is a policy decision, and in the case of the failure of the proposed University of the United States, perhaps the most momentous one in the history of American higher education.

A multiplicity of forces and motives lay behind the establishment of colleges and universities throughout our history. Among these, as noted above, have been a variety of religious motives; a fear of relapse into barbarism at the frontier; the need for various kinds of professionals; state pride and local boosterism, philanthropy, idealism, educational reform, and speculation in land, among others and in all combinations. But the resulting number and diversity of institutions, competing with one another for students, resources, and teachers, bringing market considerations and market mechanisms right into the heart of this ancient cultural institution — all that also required the absence of any central force of authority that could restrain it, that could limit or control the proliferation of institutions of higher education. The states could not be that restraining force: under the pressures of competition and emulation, they have tended throughout our history to create institutions and programs in the numbers and to the standards of their neighbours. Crucially important has been the absence of a federal ministry of education with the power to charter (or to refuse to charter) new institutions, or of a single preeminent university that could influence them in other ways.

The closest we have come as a nation to establishing such a central force was the attempt first by George Washington, and then, though with less enthusiasm, by the next five presidents, to found a University of the United States at the seat of government in the District of Columbia.[40] Washington, in fact, made provision for such a university in his will, and pleaded for it strongly in his last message to Congress, where he argued that it would promote national unity — a matter of deep concern at a time when the primary loyalties of many Americans were to their sovereign states rather than to the infant nation. In addition, Washington saw the possibility of creating one really first-class university by concentrating money and other resources in it. As he noted in his last message to Congress: "Our Country, much to its honor, contains many Seminaries of learning highly respectable and useful; but the funds upon which they rest are too narrow to command the ablest Professors, in the different departments of liberal knowledge, for the Institution contemplated, though they would be excellent auxiliaries."[41]

Here, indeed, Washington was right in his diagnosis. The many institutions that sprang up between the Revolution and the Civil War all competed for very scarce resources and all suffered to some degree from malnutrition.

Malnutrition at the margin is still a characteristic of a system of institutions influenced so heavily by market forces.

Defeat of the national university meant that American higher education would develop, to this day, without a single capstone institution. Had we instead concentrated resources in one university of high standard early in our national life, it might have been the equal of the great and ancient universities of Europe, or the distinguished new universities then being established in Germany and elsewhere. As it was, whatever the United States called its institutions of higher learning, the nation simply did not have a single genuine university — no institution of really first-class standing that could bring its students as far or as deep into the various branches of learning as could the institutions of the old world — until after the Civil War.

A national university would have profoundly affected American higher education. As the preeminent university, it would have had an enormous influence, direct and indirect, on every other college in the country, and through them, on the secondary schools as well. Its standards of entry, its curricula, its educational philosophies, even its forms of instruction, would have been models for every institution that hoped to send some of its graduates to the University in Washington. A federal system of high standard would surely have inhibited the emergence of the hundreds of small, half-starved state and denominational colleges that sprang up over the next century. They simply could not have offered work to the standard that the University of the United States would have set for the baccalaureate degree, and demanded of applicants to its own post-graduate studies. In the United States, after the defeat of the University of the United States, no one has challenged the principle of high academic standards across the whole system because no one has proposed it: there have been no common standards, high or otherwise. And in that spirit, we have created a multitude of institutions of every sort, offering academic work of every description and at every level of seriousness and standard.

The Dartmouth College Case

Another major event in the early history of the Republic had powerful effects on the shape and character of American higher education as we know it today: the 1819 decision of the Supreme Court in the Dartmouth College case. It was a landmark decision in that it affirmed the principle of the sanctity of contracts between governments and private institutions. In so doing, it gave expression to the Federalist belief that the government should not interfere with private property even for the purpose of benefiting the public welfare. John Marshall, then Chief Justice of the Supreme Court, had written earlier: "I consider the interference of the legislature in the management of our private affairs, whether those affairs are committed to a company or remain under individual direction

as equally dangerous and unwise." That anti-statist position today sounds deeply conservative; but from another perspective it is radically libertarian and had broad and liberalizing effects on higher education. Marshall and his colleagues on the Court decided in the Dartmouth College case that a charter of a private college or university was a contract which a state could not retroactively abridge. And that had important repercussions both for the growth of capitalist enterprises and for the future development of higher education in the United States.

The rationale for the proposed changes in Dartmouth's charter was the plausible argument that, as the college had been established (though as a private corporation) to benefit the people of New Hampshire, this could best be accomplished by giving the public, through the state legislature, a voice in the operation of the institution. The state wanted to improve the college as a place of learning by modernizing its administration, creating the framework for a university, and encouraging a freer, nonsectarian atmosphere conducive to republicanism.

These goals were very much in the Jeffersonian tradition that encouraged the creation of "republican" institutions — by the states — to meet the needs of a new nation. In this spirit, in 1816 the New Hampshire legislature had passed a bill giving the state government broad powers to "reform" Dartmouth. Chief Justice Marshall, ruling in favour of the college trustees, declared that state legislatures were forbidden by the Constitution to pass any law "impairing the obligation of contracts," and that the charter originally granted the college was a contract.[42] In many ways Marshall's opinion followed the traditional view of the role of educational institutions in English society.

The Dartmouth College decision, preventing the state of New Hampshire from taking over the college, sustained the older, more modest role of the state in educational affairs against those who looked to the government to take a greater role in the working of society and its institutions. Marshall's decision had the practical effect of safeguarding the founding and proliferation of privately-controlled colleges, even poor ones. Thereafter, promoters of private colleges knew that once they had obtained a state charter they were secure in the future control of the institution. After this decision, state control over the whole of higher education, including the private sector, was no longer possible.

The failure of the University of the United States and the success of Dartmouth College in its appeal to the Supreme Court were both victories for local initiative and for private entrepreneurship. The first of these set limits on the role of the federal government in shaping the character of the whole of American higher education; the second set even sharper limits on the power of the state over private colleges. Together, these two events constituted a kind of charter for unrestrained individual and group initiative in the creation of colleges of all sizes, shapes and creeds. Almost any motive or combination of

motives and interests could bring a college into being between the Revolution and the Civil War; and thereafter its survival depended largely on its being able to secure support from a church, from wealthy benefactors, from student fees and even perhaps from the state. The colleges thus created were established with relative ease, but without any guarantee of survival. And as a result, there arose a situation resembling the behaviour of living organisms in an ecological system — competition for resources, high sensitivity to the demands of the environment, and the inclination, over time, through the ruthless process of natural selection, to adapt to those aspects of their environment that permitted their survival. Their environment also has included other colleges, and later, universities. So we see in this frog pond a set of mechanisms that we usually associate with the behaviour of small entrepreneurs in a market: the anxious concern for what the market wants, the readiness to adapt to its apparent preferences, the effort to find a special place in that market through the marginal differentiation of the product, a readiness to enter into symbiotic or parasitic relationships with other producers for a portion of that market. That is, to this day, the world of American higher education.

The Morrill Act of 1862

The Morrill Act, which created the land-grant colleges and universities, is indeed a landmark in American higher education. It was very far from being the first provision of support for higher education by central government through grants of government-owned land; indeed, under the Articles of Confederation, the Northwest Ordinance provided for tracts of land to be set aside for the support of institutions of higher education in the Western Reserve. Ohio University, among others, was a beneficiary of such an early grant. But the Morrill Act provided support on an altogether different scale; in 1862 the federal government gave land to the states for the support of colleges and universities of an area equal to the whole of Switzerland or the Netherlands, about 11,000 square miles. And it did this in the most extraordinarily permissive way. The Act

> made no fixed requirements as to type of institution or, beyond broad designations of fields of study, as to content of instruction. The only positive obligations were to dispose of the land or scrip, in manner or on terms left to state discretion; maintain the fund as a perpetual endowment invested at 5 percent; devote the income to one or more institutions which, while including the traditional college subjects, must provide instruction in agriculture, mechanic arts, and military tactics; and make an annual report on the results.[43]

The beneficiaries of the Act were whoever the states decided they should be — among them Cornell in New York, MIT in Massachusetts, and Yale's Sheffield School in Connecticut. In some states the money went to an existing state-

supported institution; in California, the University was created through a merger of an existing private liberal arts college with the land-grant endowment. In both Oregon and Kentucky it went to denominational colleges which remained under church control.[44] In many states, especially in the south and west, a new "A & M" college was created to be the beneficiary of the land-grant fund. But basically, the federal government put the money — or at least the script — on the stump and walked away, partly because there was no federal educational bureaucracy to provide for federal direction and control of state policy, and partly because there was no consensus about what these institutions should look like, or should be doing. Indeed, very sharp differences developed in Congress and outside it about the relative emphasis to be placed in these new institutions on pure or applied science, on practical experience and manual work, or on the old classical curriculum. The federal government's solution was to allow these contending forces to fight it out in each state. The result, needless to say, was various and messy, marked by ineptitude and corruption in places, confusion almost everywhere, but also by great imagination, creativity, and even genius — one thinks of the role of Ezra Cornell in New York. Some states got 50 cents an acre for their land, others ten times that much, and the variation in educational practice and academic standard was of the same order of magnitude.

The question may be asked what the costs would have been of trying to create a tidier system, more rationally coordinated, marked by a clearer common sense of academic direction, higher academic standards, more highly qualified and better paid staff, better prepared students, and more adequate initial funding for buildings and equipment. We are, of course, describing the creation of the modern European university systems — and they have been trying to break out of the straitjacket of those constricting commitments and structures since the end of the second World War, with great difficulties and only partial success.

The GI Bill of 1944

We now rightly think of the *Servicemen's Readjustment Act* of 1944 — the original GI Bill — as one of the best things that ever happened to American higher education. It broadened the idea of college-going enormously, and moved the enrolment rate from 15 percent of the age grade in 1939 towards 50 percent or more currently. It also brought a seriousness and maturity to undergraduate classrooms that were not accustomed to it, and which they have never quite lost.

But at the time it was debated no one expected it to be quite as successful as it was. Most estimates during the debates were that perhaps 800,000 veterans would take advantage of the program. By 1956, when the last veteran had received his last check, 2.25 million veterans had attended college under its

auspices.[45] In comparison, the United Kingdom had a comparable program, the "Further Education and Training Scheme," which raised university enrolments from about 50,000 before World War II to 80,000 shortly after the war, causing great concern in the Ministry of Education regarding a possible decline in standards.[46] In the UK that problem was met by raising standards for entry to the universities steadily after the war. As a result, the proportion enrolled in British higher education in 1987 (14 percent of the age grade), was roughly the same as the proportion enrolled in American colleges and universities 50 years earlier.

Two points of the GI Bill deserve particular emphasis: first, veterans could take their tuition payments and stipends anywhere they wished, certainly to any accredited college or university that would accept them, and to many other nonaccredited post-secondary education institutions, too. Again there were irregularities at the edges: some corruption, some institutions that took tuition money without doing much teaching, whose students enrolled for the modest stipends provided. But again, we must consider the costs of closing those loopholes: the proliferation of forms and surveillance, the steady pressure to rationalize and standardize in order to make assessment, management and credentialing easier. The federal government accepted the probability of abuse of the legislation, perhaps recognizing that rationalization in higher education as elsewhere is the enemy of diversity. And, as we have seen, federal policies on the whole have consistently favoured diversity.

Second, one crucial provision of the GI Bill stipulated that "no department, agency, or officer of the United States, in carrying out the provisions [of this Act] shall exercise any supervision or control, whatsoever, over any State, educational agency ... or any educational or training institution."[47] Of course, that is in the tradition of our constitutional reservation of responsibility for education to the states. But beyond that, we see here the same self-denying ordinance — the sharp separation of financial support from academic influence — that marked earlier federal policy, and that became the model and precedent for the *Education Amendments* of 1972 and thereafter which provides substantial noncategorical need-based federal aid to students by way of grants and loans.[48]

The Education Amendments of 1972

The federal legislation on education passed in 1972 established higher education as a national priority in its own right. Various agencies of the federal government were already providing support for targeted issues, such as science laboratories and libraries, and for targeted groups of students through fellowships for graduate students in certain areas deemed vital to the national security or economic welfare. But during the late 1960s and early 1970s, broad support

developed for greatly expanded federal aid for higher education, both to institutions undergoing rapid growth, and to encourage further expansion of access, especially to groups historically underrepresented in higher education.

Most of the major organizations in higher education came out strongly in favour of direct unrestricted aid to the colleges and universities themselves. But key members of Congress, and the influential Carnegie Commission on Higher Education led by Clark Kerr, argued persuasively for federal support in the form of need-based aid to students themselves, rather than block grants made to the institutions, and linked to enrolments.[49] The tradition of the GI Bill was surely an element in the debate, but the driving motivation of those in favour of federal support in the form of student aid was the wish to increase the power of the students in the market, and thus to encourage the responsiveness of the institutions to changing patterns of student demand. The Amendments as enacted in fact centred on student aid; while continuing certain earmarked provisions for the institutions (such as support for college libraries and the construction of certain academic facilities), the largest part of the new programs took the form of federal grants and guaranteed loans to students, with special attention given to the needy or disadvantaged. This was now broad-spectrum student aid, not limited to particular fields of study or professions.

That the legislation took the form it did almost certainly enabled it to survive periodic budget cuts and changes of political mood in Washington, by creating a large, stable voting constituency of greater weight to politicians than that of the leadership of higher education alone. But closer to the motivations of those who wrote the legislation is the fact that federal support in the form of student aid is the surest way of defending the autonomy of institutions of higher education against the leverage that block grants would have given the federal government when, in time, it surely would have wanted to exert its influence over those institutions.

Over time, further legislation has extended federal aid to broader segments of the society, and substituted loans for grants for most of the students aided. But while many of the provisions for institutional aid have been phased out over the last two decades, student aid remains the largest element of the federal role in higher education, alongside the equally crucial support provided by federal agencies to university-based research.

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How did these five decisions, taken together, constitute an educational policy, and why, in retrospect, might one think of them as "successful"? I suggest that in each case the decision contributed to the diversity of American higher education — a diversity of type, of education character and mission, of academic standard, and of access. In each case, public policy tended to strengthen the competitive market in higher education by weakening any central authority

that could substitute regulations and standards for competition. It accomplished this by driving decisions downward and outward, by giving more resources to the consumers of education (and the institutions most responsive to them); they strengthened the states in relation to the federal government, as in the defeat of the University of the United States, and the passage of the Morrill Acts. It gave the institutions themselves power in relation to the state governments, as seen in the Dartmouth College case and the Hatch Act, and gave students power in relation to their institutions, as in the GI Bill and the *Education Amendments* of 1972.

CURRENT EXPANSION OF FEDERAL INTERVENTIONS

From the early land-grant, to speculators encouraging settlement in the Northwest Territories, to the latest Pell grants for needy students, the federal government's central policy has been to expand and extend access to higher education more and more widely throughout the society. And since the second World War the federal government, with an expressed interest in the economic and military strength of the nation, has been the major source of support of both basic and applied research in the universities. These commitments of funds, directly to researchers and students, are still the largest and most visible forms of federal involvement in American higher education, the extent of which is sketched above. There is also the substantial but largely hidden subsidy provided by the federal government (and most state governments as well) through provision in the tax code for full deduction for income tax purposes of contributions to institutions of higher education (along with most other kinds of nonprofit "charitable" institutions). A further subsidy in the tax code gives parents a dependent's exemption for children who are full-time college or university students for whom they provide more than half the support.

In the past three decades the federal government has extended its interest in higher education in ways that reflect the central role that this institution now plays in American society and the economy. Some of these further interventions reflect the hugely increased size of the federal role in support for research since the end of World War II. The federal government's decisions about how to allocate its research support funds now affect the whole shape and direction of American science. One set of issues centres around the competitive claims of "big science" — such enormous and expensive enterprises as the superconductor-supercollider, the plan to map the human genome, the launching of the Hubble telescope, and the exploration of space — and the ordinary claims of university-based researchers doing studies on their own initiative individually or in small teams. Big science is necessarily competitive with small science for funds; but its decisions are each so expensive and consequential that they inevitably bring political considerations (and pressures) into the heart of

the scientific decisionmaking process. Efforts continue to be made to insulate these decisions from the most crass political forces, and to make them "on their merits," but these mechanisms are strained by the traditions of state competition for federal funds in Congress and the White House, the traditions of political deals and pork-barrel legislation in a populist society.

Until recently, the nature and administration of research overhead funds, paid by the federal government as part of their grants and contracts with university researchers, would have nicely illustrated my theme of the federal government's self-denying principle with respect to American higher education. These overheads, intended to reimburse the universities for the costs of maintaining the research facilities in which the federally-funded scientific work was done, were negotiated with the individual universities, public and private, and then very loosely monitored, in ways that suggested that government funders of research were primarily interested in supporting the infrastructures of research without trying to manage them. The recent embarrassing revelations of inappropriate and (in part) illegal charges for overhead costs at Stanford threaten to change this older, looser relationship between the universities and their federal funding agencies, not just for Stanford but for the whole universe of research universities.[50] The case has also brought committees of Congress (and their staff members) directly into the overhead picture. To a considerable degree, the freedom of American colleges and universities from the kind of close governmental oversight familiar in other societies has been based on a relatively high degree of trust on the part of American society (and its governmental institutions) in higher education. If that trust is eroded through such scandals as at Stanford, the autonomy of the universities may be similarly eroded. It is too early to tell the effects of this event on the larger question of the relations of higher education with agencies of the federal government.

Some observers of federally-funded research believe that we may already have reached the point of no return. In an editorial in *Science*, Philip Abelson observes that:

> A particularly dismaying feature of the government-university interface is that relationships continue on a long-term course of evolving deterioration. In the early days after World War II, there was a high degree of mutual trust and an absence of bureaucratic requirement. Scientists had freedom to formulate and conduct their programs of research. Later the bureaucrats took over and placed emphasis on project research with highly detailed budgets and detailed research proposals. That, of course, is the road to pedestrian research.[51]

And he cites the proliferation of administrative requirements and regulations as a serious drag on the freedom and quality of scientific work in the universities.

In recent decades the federal government — indeed all three branches — have become increasingly active in connection with its interest in the protection

of the civil rights of citizens, most notably in relation to possible forms of discrimination against racial and ethnic minorities, women and other vulnerable groups in American colleges and universities. These activities, affecting such issues as the confidentiality of academic personnel files, the monitoring of student admissions and faculty appointment and promotion practices, the protection of human subjects in scientific research, and many rules and regulations governing federally funded research, have by-passed state agencies and brought the federal government directly into the daily life of the colleges and universities.

These developments are at odds with the pattern of federal support without the exercise of substantial directive power that I have suggested has been the historical relation of the federal government to American higher education. One can see those developments as dramatic but limited to changes in policy, leaving issues of basic character and mission of American colleges and universities to their own governing boards and state authorities. Others may see these developments and tendencies as marking a sharp change in the character and direction of federal policy in the realm of higher education, associated with the federal government's increased role as protector of civil rights (which definition has been broadened by federal courts in recent decades), and also with the sheer growth in the size, cost, and national importance of the education, training and research done in American universities and colleges. It remains to be seen whether a decline in public trust in the institutions of higher education, or government's legitimate interest in the defense of equal rights for all citizens, will lead to fundamental changes in what has been a unique and fruitful three-cornered relationship between American colleges and universities and their state and federal governments.

NOTES

My thanks to Suzanne Peterson for her help in the preparation of this paper.

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2. *Chronicle of Higher Education*, 1 September 1988.
3. "Almanac," *Chronicle of Higher Education*, 5 September 1990, p. 3.
4. *Digest of Education Statistics, 1989* (Washington, D.C.: U.S. Department of Education, 1989), tables 126 and 133, pp. 30 and 36.
5. *Digest, 1989*, table 269, p. 292; "Almanac," p. 25.
6. *Digest, 1989*, tables 270 and 271, pp. 293-94.
7. *Chronicle of Higher Education*, 6 September 1989, p. A31.
8. "Almanac," pp. 13 and 20.
9. *Chronicle of Higher Education*, 6 Sept. 1989, p. A31.

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13. John S. Brubacher and Willis Rudy, *Higher Education in Transition* (New York: Harper and Bros., 1958), p.227.
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23. Ibid., p. 47.
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27. W.H.G. Armytage, *Civic Universities: Aspects of a British Tradition* (London, 1955), pp. 128-40, 153-56; and Irene Parker, *Dissenting Academies in England* (Cambridge: The University Press, 1914), pp.124-36.
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36. Robson, "College Founding," p. 323.
37. Herbst, *Crisis*, p. 136.
38. Charters were granted rather promiscuously to any group that seemed prepared to accept responsibility for raising funds for a building and hiring a president. On the founding of Allegheny College in western Pennsylvania in 1815, see Rothblatt and Trow, "Government Policies and Higher Education," pp. 14-17.
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40. Trow, "Aspects of Diversity in American Higher Education," pp. 271-90.
41. Richard Hofstadter and Wilson Smith (eds.), *American Higher Education: A Documentary History*, 2 vols., (Chicago: University of Chicago Press, 1961), p. 158.
42. Ibid., p. 218.
43. Earle D. Ross, *Democracy's College: The Land-Grant Movement in the Formative Stage* (Ames, IA: The Iowa State College Press, 1942), p. 68.
44. Ibid., p. 75.
45. Keith W. Olson, *The G.I. Bill, The Veterans and the Colleges* (Lexington: The University of Kentucky, 1974), p. 43.
46. H. Peston and H.M. Peston, "The Further Education and Training Scheme," in Selma J. Mushken (ed.), *Recurrent Education* (Washington, DC: National Institute of Education, U.S. Department of Education, 1974).
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48. For a discussion of the debate in Congress and elsewhere leading up to the passage of this law, see Finn, *Scholars, Dollars, and Bureaucrats*, especially pp. 121-28.
49. Ibid.
50. *Science*, 22 March 1991, p. 1420.
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Higher Education in Federal Systems: Australia

Robert H.T. Smith and Fiona Wood

AUSTRALIAN FEDERALISM

Federation occurred in 1901, and the resulting federal system in Australia operates at three levels — Commonwealth, state and local government. Each level of government is meant to have distinct responsibilities, with those areas perceived to be of national importance (e.g., defence and foreign affairs) designated as Commonwealth functions. While on the face of it this seems to be a reasonable arrangement, increasingly the states question it and argue that the Commonwealth has intervened in areas that are properly considered to be state responsibilities. Such intervention is claimed to result in substantial inefficiencies because of overlap or duplication of effort. The lack of "harmony and consistency in the structure of Commonwealth/state regulation" has itself been the focus of a recent policy discussion paper by the Economic Planning Advisory Council,[1] and a review of the relations and distribution of functions between the Commonwealth and the states was foreshadowed in that document.

This blurring of responsibilities between the two levels of government — state and federal — is by no means peculiar to Australia. However, in Australia, we would argue that in the last few years (and certainly through the 1980s) there has been a deliberate move from "soft federalism" to "hard federalism," in which the federal government has adopted a far more assertive posture than in the past. One reason for this is the Commonwealth's assessment of Australia's economic problems. In particular, it relates to the nexus between the technology base, export earnings, and intellectual skills (or the knowledge base). This is crucial for any modern nation, but especially for Australia with its unique set of problems related to a softening of the export earnings base and a manufacturing sector persistently in deficit. The creative exploitation of this nexus presents a formidable challenge, involving as it does education and training;

retraining; research; improved technology transfer; the development of scientific and technological skills; and an improved international outlook, including an understanding of Asian, Pacific and European cultures, markets and economies. Nowhere is the challenge — and opportunity — greater than in the higher education system, because it is in it that much of the research and development capacity of Australia is to be found. And research and development is the activity through which the nexus may be exploited most effectively.

Given this context, it should be no surprise that change and adjustment were the imperatives of the 1980s, and continue to be the imperatives of the 1990s. They flow from the massive program of restructuring involving deregulation and microeconomic reform embarked upon by the federal government since 1983: restructuring of the public service; of the financial markets; of social security arrangements; of industry; of communications, shipping and transport; of industrial awards; and of education. The general rationale for this agenda is a conviction that there is an urgent need to position Australia to survive and thrive in the twenty-first century.

Higher education has been the subject of an array of policy initiatives taken by the federal government (despite the fact that the vast majority of institutions operate under state statutes). This is understandable, given the fact that since the early 1970s the federal government has provided complete funding for higher education (this commitment being coupled with the abolition of tuition fees). Such funds are transferred to the states under the terms of section 96 of the Constitution.[2]

> **96.** During a period of ten years after the establishment of the Commonwealth and thereafter until the Parliament otherwise provides, the Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.

In Australia, therefore, there is no question about whether higher education is on the public policy agenda — it is. The release of the Green[3] and White[4] Papers in December 1987 and July 1988, respectively, attest to this. Having been peripheral to public policy for so long,[5] the major debate concerning higher education now is about whether the policy settings are correct. Questions are raised frequently about whether it is appropriate for the federal government to articulate such things as participation targets;[6] priority areas for undergraduate and graduate enrolments; priority areas for research funding; the overall number of institutions (reflecting a desire to decrease the number of autonomous small institutions); appropriate features of industrial awards; and many other matters.

Despite the ongoing debate over the respective roles of the federal and state governments in the higher education sector, Australian higher education began the 1990s with new program advisory and delivery arrangements; a unified national system of higher education institutions (replacing the former binary

system in which there had been both universities and colleges of advanced education); an identification of system and institutional management and governance as a priority area; new funding and administrative arrangements for research; and a user contribution approach to funding higher education. Such policy changes reflect a determination on the part of the Commonwealth that the higher education sector be more accountable for the funding it receives under section 96 of the Constitution. They may also be interpreted as reflecting a deliberate move from "soft federalism" to "hard federalism."

FEDERALISM AND HIGHER EDUCATION

The move from an elite to a mass system of higher education in Australia is essentially a post-World War II phenomenon. It is reflected in the development of higher education institutions from a small number of relatively isolated, largely autonomous and state-funded colonial institutions, peripheral to the central concerns of a pioneering society, to a national system funded and coordinated by the federal government and linked directly to the nation's economic well-being. The factors prompting the federal government's recent interest in the planning and coordination of higher education include: the increasing concern with access, equity and participation; the central importance of educated and trained manpower to the economy; the number and variety of publicly funded institutions involved in higher education; the wide range of teaching and research undertaken; and the many different types of client groups and modes of study. Clearly, the nation's priorities in educational development generally would not be satisfied by chance alone. In Australia, the federal government's use of its powers under section 96 of the Constitution, and the inquiries of the Murray (1956), Martin (1964), Williams (1979) and Hudson (1986) committees (all federal-level enquiries) attest to the increasing concern by the Commonwealth since World War II to establish a national policy for higher education.[7]

A striking anomaly in Australian higher education is that, with the exception of the Australian National University and the University of Canberra, the states have the legislative responsibility for higher education, while financial responsibility (at least since 1974) rests with the Commonwealth. This situation inevitably creates real tension in the dialogue between these two levels of government;[8] between institutions and either level of government; and inevitably between institutions. The division of powers has also complicated efforts to plan for the higher education sector, with regulation until 1987 being carried out by a number of federal and state commissions and boards.

During the 1960s and 1970s there were moves by the states to coordinate their higher education institutions. For example, in New South Wales, the Higher Education Authority and boards for universities and advanced education

created in 1969 were replaced by a Higher Education Board in 1975. Western Australia created a Tertiary Education Commission in 1970, and replaced it with a Postsecondary Education Commission in 1976. While similar initiatives were taken by the other states, there was only limited coordination in higher education matters between states.

Despite the different types of federal and state control of higher education, the universities were not as closely regulated in their activities as the colleges of advanced education. For example, in relation to the colleges, each state had a coordinating board which limited the powers of the colleges' governing councils. State boards also had the power to determine appointments, budgets, course approvals, awards (i.e., degrees); and nomenclature. However, with the dismantling of the binary system in 1988, the federal government effectively "eliminated the major role of the state boards in the policy and administration of the advanced education sector."[9]

In its efforts to coordinate higher education, the federal government established the Australian Universities Commission (AUC) in 1959 (as recommended by the Murray Committee). In 1971, it established the Commission on Advanced Education (CAE) to advise on the amount and distribution of financial grants made under section 96 of the Constitution. The distinctive roles of these two bodies were never quite clear and, while they were required to consult with each other, there was no mechanism to ensure that they coordinated their plans.[10] In 1977 the federal government achieved greater control and coordination of higher education by amalgamating the separate statutory commissions for universities, colleges of advanced education, and Technical and Further Education (TAFE) into a single commission: the Commonwealth Tertiary Education Commission (CTEC). While the CTEC comprised separate commissioners and councils for each of the three sectors under the leadership of a commission chairman, it was not until 1986 that CTEC's powers were strengthened by making the three councils advisory rather than funding bodies.

In 1988, there was a major change in the nature and composition of the federal portfolio with which higher education institutions interact. The CTEC, the buffer between the higher education institutions and government was disestablished and replaced by a new advisory body — the National Board of Employment, Education and Training (NBEET). The Department of Education became the Department of Employment, Education and Training (DEET — which also incorporated the employment and training components of the former Department of Employment and Industrial Relations), reflecting a commitment to a coordinated, integrated approach to policy development and articulation in these areas. In addition, program delivery (now the responsibility of the Department of Employment, Education and Training) was separated from program and other policy advice — now the responsibility of the National Board of

Employment, Education and Training and its subsidiary councils (as well as the department).

There have been several explanations why CTEC was replaced. These include: a move away in Australian public administration from autonomous statutory authorities in order to ensure more direct government influence; the increasing involvement of a number of government departments in the tertiary education sphere which eroded the CTEC's authority and resulted in impositions of unrealistic guidelines that the CTEC could not achieve; and the undermining of CTEC operating procedures by the increasing incidence of the states using their legislative responsibility for universities to confer university status on a number of institutes of technology.[11] (It is also worth noting that the institutions themselves — universities and colleges — were not especially supportive of the CTEC.)

The establishment of NBEET followed a review of portfolio advisory structures after the reorganization of the Australian Public Service in mid-1987, following the Labor Party's return in the July election. The Board which is a statutory body and the principal advisory body to the minister, incorporates a number of functions of previous advisory bodies including the Commonwealth Schools Commission, CTEC, the Australian Council for Employment and Training, and the Australian Research Grants Scheme.

The NBEET has four subsidiary councils: the Schools Council; the Higher Education Council; the Employment and Skills Formation Council; and the Australian Research Council (ARC). Membership of the Board and its councils is drawn from the corporate sector, unions, education and training providers, and a variety of interested groups across the community. It is thus a corporatist body, and reflects the pervasive influence of peak-bodies in consultative arrangements.

The Board, which both responds to references from the minister and provides advice on policy issues on its own motion, coordinates the independent and expert advice of its councils. Its reports to the minister, whether in response to his reference or on its own motion, are tabled in the Commonwealth Parliament. The Board is intended to provide an integrated approach to employment, education, training, and research, ensuring that policy issues are considered in the context of the federal government's broad social, economic and resource priorities. The Commonwealth consults with the states through Joint Planning Committees (especially on higher education matters) and the Commonwealth/State Consultative Committee. However, where the states place demands on the Commonwealth that exceed the available level of resources, the final allocation is based on a (federal) judgement of that which best serves the system as a whole. This inevitably creates tensions between the two levels of governments requiring bilateral discussions outside the Joint Planning Committee process.

It is at this point that a significant implication of the new policy environment should be identified. The mandate of the former CTEC could be taken as follows: *it shall report independently and may advise the Minister.* In contrast, the mandate of the successor body, NBEET (and its councils), is that *it shall respond to the minister's formal references and may pursue matters on its own motion, provided that this latter activity does not compromise its ability to respond to the minister's references.* This subtle change in discretionary and obligatory activity has become the symbol of the change from "soft federalism" to "hard federalism."

THE DEVELOPMENT, ORGANIZATION AND MANAGEMENT OF HIGHER EDUCATION

In comparison with the United States and Canada, the development of university education in Australia was very slow (Table 1). The first universities of Sydney and Melbourne were established in the mid-1850s, but it was not until the early twentieth century that each state had its own university. This relatively slow development reflected the prevailing economic conditions, relatively sparse populations, and low secondary education retention rates from colonization to World War II. The universities established during this period were all secular in origin with academic traditions predominantly British, and depended for their growth on state government funding.

University education developed rapidly in Australia after World War II when student enrolments increased substantially, a trend that has continued through to this decade. Graduate work and research also became more prominent in universities after the war and American influences began to supplant the British. The PhD was introduced soon after World War II, and in 1989 almost 31,000 students were enrolled in higher degree programs.[12] From 1946-75 the number of universities more than trebled, and in 1946 the Commonwealth established a primarily research university — the Australian National University — in Canberra. However, it is debatable whether this growth in higher education in Australia after World War II would have been so dramatic if the states had had to assume the main responsibility for its financing.

A major structural change to the organization, funding and delivery of higher education was introduced in 1988 with the release of *Higher Education: A Policy Statement* (the White Paper). The binary system of universities and other institutions of higher education was abolished and was replaced with a unified national system in which differential funding of universities and colleges was to be phased out. The new system would comprise fewer and larger institutions (brought about by amalgamations of the 66 separate higher education institutions), which received grants on the basis of agreed "educational profiles." The unified national system was intended to achieve greater efficiency and

Table 1: Pre-unified National System Universities

	University/State	*Year established*
PRE-WORLD WAR II	Sydney (NSW)	1850
	Melbourne (VIC)	1853
	Adelaide (SA)	1874
	Tasmania (TAS)	1890
	Queensland (QLD)	1910
	Western Australia (WA)	1913
POST-WORLD WAR II	ANU (ACT)	1946
	New South Wales (NSW)	1949
	New England (NSW)	1954
	Monash (VIC)	1958
	La Trobe (VIC)	1964
	Macquarie (NSW)	1964
	Flinders (SA)	1965
	Newcastle (NSW)	1965
	James Cook (QLD)	1970
	Griffith (QLD)	1971
	Murdoch (WA)	1973
	Deakin (VIC)	1974
	Wollongong (NSW)	1975

effectiveness in the delivery of higher education through reduced unit costs in teaching, to improve credit transfer and rationalization of external studies (no fewer than 45 institutions offered degree programs by external study); to increase substantially the number of student places and the output of graduates; to enable institutions from the former advanced education sector to compete more effectively for Commonwealth research funds; and to promote greater diversity in higher education. Institutions were also encouraged to be more entrepreneurial in securing funding from sources other than the federal government, hence there is now a strong emphasis on the establishment of links with industry both in terms of research and the provision of courses.

Membership of the unified national system required institutions to satisfy a minimum size criterion of 2,000 equivalent full-time student units (EFTSU). The qualifying size for a broad teaching profile and financial support for a few fields of research was 5,000, while 8,000 was the benchmark for financial support for a wide range of research activities as well as teaching. When the White Paper was issued in 1988, there were 21 universities and 45 colleges of advanced education (CAEs). Of these 66 institutions, 23 had fewer than 2,000 EFTSU, and a further 23 had between 2,000 and 5,000. Of the remaining 20, ten had between 5,000 and 8,000, and ten had more than 8,000. Of the 21 universities, 12 had fewer than 8,000 (eight of the 12 had fewer than 5000). Although some amalgamation negotiations are still in progress (mainly in Victoria) it is expected that the higher education system will stabilize around 35 public universities, which would be just over half the number of the 1988 institutions (see Appendix). Universities in the 1990s continue for the most part to be secular and federally funded, and there are only three private universities in Australia.

There are several dimensions of governance in Australian public universities. First, there is the "supreme" level of authority, normally vested in a council or senate — or, as in several of the new and revised Acts in New South Wales, a Board of Governors. To a greater or lesser extent, governing bodies have overall responsibility for financial, legal, property, staffing and academic matters. In fact, many of these areas effectively are delegated, although the board/council/senate does formally resolve upon recommendations. While it may not be explicitly provided, the academic governance of the university is the primary responsibility of the senior academic body, so that there may be a *de facto* bicameral system. Thus, while the ultimate locus of authority and responsibility is the council, senate or board of governors, the senior academic body and the academic units (faculties, departments, schools, centres) are especially influential in the development and administration of academic policy and in determining the content, organization and delivery of academic programs and in the assessment of students' performance in those programs.

The model of the Vice-Chancellor as the Chief Executive Officer (CEO) who, as a member of the governing body, has day-to-day responsibility for the leadership and management of the institution, is increasingly the case. Just as the Vice-Chancellor has become more of a CEO, so faculty or school deans are less frequently elected and more typically appointed, and carry substantial resource, budget and personnel responsibility. In some institutions the dean also has the responsibility of chairing the faculty or school, and there can be a delicate balance between faculty advocacy and the promotion of university-wide views.

Three features of university governing bodies in Australia have implications for accountability: their size, role and composition. Although the White Paper

proposed that an appropriate size for governing bodies was 10-15 members, this has not been achieved anywhere, although the New South Wales government revised its University Acts to reduce the size to around 20 members.

In all universities, the Chancellor (who may be drawn from outside the governing body) chairs the meetings and also acts in a ceremonial capacity. Members of governing bodies arrive there by election, by appointment, as ex-officio members, and (sometimes) by co-option. In most institutions, external members are in the majority — this is an important accountability criterion. In the new multi-campus and network universities in New South Wales, some campus and network members also have an advisory council, whose function is to advise the campus principal, the Vice-Chancellor and the Board of Governors.

Just how the higher education system — and, in particular, universities — will alter as the unified national system consolidates will not be known for some time. In the past, universities were funded as *institutions*, whereas the colleges of advanced education were funded for *collections of agreed programs*. In the unified national system all institutions are to be funded on the basis of approved "educational profiles." The universities had a tradition of autonomy and collegiality reflected in strong academic boards, whereas the colleges of advanced education, which were not legally autonomous, had a tradition of strong line management. Under the unified national system, governing bodies of universities are expected to delegate responsibility and authority to their chief executive officers to implement agreements with the Commonwealth; provide "strong managerial modes of operation," and to streamline decisionmaking (thus minimizing delays between making and implementing decisions that were thought to occur where there were strong collegial traditions).

In the mid-1970s the then-president of the Federation of Australian University Staff Association claimed that the universities (with the exception of the Australian National University), were "historically, legally and emotionally tied to the States."[13] Whether the universities, now members of the unified national system, experience any conflict in reconciling both federal and state influences in the development of higher education remains to be seen. What is known is that a number of state governments are providing substantial funding for their higher education institutions in addition to that provided by the Commonwealth.

FINANCING HIGHER EDUCATION

One of the major policy challenges for governments in Western countries in managing their higher education systems has been getting the appropriate balance between the needs of funding, planning, coordination and accountability on the one hand, and the need for institutional autonomy and appropriate

discretion in setting their own goals and managing their affairs on the other. Two broad policy strategies have been prominent over the last two decades: first, the use of greater government planning and control through the application of "stringent regulations" and tightened budget allocations; and second, the "stepping back" by governments from detailed centralized control by encouraging higher education institutions to be more autonomous, self-regulating and market orientated in their operations, but within an overall framework of government priorities.[14]

The attractiveness of the self-regulation strategy is that institutions are able to:

> obtain an autonomy relative to central government, but at the same time be forced to go into the market in which they must seek sponsorship. They have the freedom to compete for funds. This enlargement of institutional autonomy is assumed to result in a better adjustment to changing societal conditions but at the same time, governments still have to protect the interests of the "consumers" (i.e., students) and formulate the "overall targets" of the higher education system.[15]

Until very recently, policy on higher education in Australia could be described as following the first model. However, there is increasing evidence that the federal government is moving more towards the self-regulatory model of higher education management. The central question with both these models is how the federal government's perception of system management is realised. For both strategies the answer is clearly through the use of finance as a lever for policy implementation.

Commonwealth financial assistance to universities was initially provided on an ad hoc basis from the mid-1940s until the late 1950s. However, as a result of an inquiry into university finances in 1956 (the Murray Report), the Commonwealth agreed to share responsibility with the states for financing the university sector. Until 1973, the federal government matched state funding of higher education by providing grants based on the formula of dollar for dollar for capital expenditure; one Commonwealth dollar for every 1.85 dollars provided by the states; and from fee revenue in the case of recurrent expenditure. However, the states did not always take up the full Commonwealth allocation and a considerable proportion of each state's fee revenue came from the Commonwealth government through its provision of Commonwealth undergraduate and post-graduate scholarships. Other income for universities included fees, endowments, donations and special grants. Similar provisions existed for the colleges of advanced education.[16]

From January 1974 the funding of universities and colleges of advanced education became a federal responsibility. However, the funds still came to the institutions via state treasuries, albeit as section 96 transfers from the federal government. Harman notes that once the Commonwealth assumed full financial responsibility for universities "the interest of the states moved from concern

with matching Commonwealth support towards a greater concern with the overall level of financial support and with obtaining an adequate share of the funds available for universities by the federal government."[17]

Many higher education systems, including Australia's and Canada's, are almost totally dependent on government funding, thus making them vulnerable to the "power of the purse." While various Australian federal governments have been able to influence substantially the shape and nature of the higher education system over the past four decades[18] through section 96 transfers, recent examples have been quite explicit. These include the requirement for institutions to join the unified national system (in order to be eligible to receive triennial funding), the criterion for which is size. Within the unified national system, funding arrangements with individual institutions are developed on the basis of output, quality and performance measures. Accountability for the resulting funds is to be demonstrated via educational profiles, which give the government considerable discretion to influence institutions in their decisions about areas of teaching and research. They also provide opportunities for the discussion of how they should manage their activities regarding credit transfer and equity programs.

Since the release of the White Paper in 1988, recurrent funding has been on a rolling triennial basis, with grants being allocated as a single block sum to replace previous fragmented funding arrangements. In 1989, a National Priority Reserve Fund was created by taking 1 percent "off-the-top" from the aggregate grant to all higher education institutions. Commencing in 1988, there was a progressive redirection of funds from the pre-1987 universities to the Australian Research Council ($5 million* in 1988 with further amounts until it stabilizes at $65 million) These funds are allocated on a competitive basis.

The allocation of resources to individual institutions occurs as a result of consultations between officers of DEET, representatives of NBEET, state authorities and higher education institutions. As a basis for the negotiation of educational profiles for the 1991-93 triennium, institutions were asked to provide documentation comprising data on actual and projected teaching activities, proposals for capital projects in 1993, a research management plan and data on the resources directed to research, an equity plan and an Aboriginal education strategy. Prior to the educational profile discussions with institutions, meetings of the (Commonwealth/State) Joint Planning Committees are held, the main purpose being to establish broad parameters for higher education planning state by state. These take account of such matters as demographic projections, trends in school retention, and higher education participation.

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* Note: Unless otherwise noted, all dollar ($) amounts shown in this chapter are for Australian dollars.

Table 2 below shows the federal resources available for the higher education sector from 1990 to 1993.

The federal government has commissioned several discipline reviews, an initiative that should be seen as part of its overall interest in the quality, content and efficiency of higher education.[19]

State ministers for education as a group have a vested interest in ensuring that the articulation between schools, TAFE, universities and other education and training providers is appropriate to the economic and social needs of their respective populations. Therefore, it is not surprising that a number of state governments are involved in providing funding for their higher education institutions. What is significant, however, is the amount of funding allocated. For example, in Victoria the estimate of total state expenditure on higher education in 1990 was $71 million ($293 million over the period 1985-90). In 1990, 3,000 nursing places and 600 places at the Victorian College of Agriculture and Horticulture were funded directly. The Western Australian government made grants to higher education totalling $13.7 million in 1989. In Queensland, 1,500 commencing undergraduate places were funded in 1990 at a total cost for 1989-90 to 1993-94 (i.e., including the "pipeline") of $27 million. Substantial funds are also allocated to other areas of the higher education system in

Table 2: Resources Available for Higher Education from 1990 to 1993*

	1990 *$m*	*1991* *$m*	*1992* *$m*	*1993* *$m*
Total Operating Resources	3,229.0	3,279.0	3,400.5	3,496.6
National Priority (Reserve) Fund**	(29.0)	(29.9)	(30.9)	(31.8)
Total Research Programs	166.1	216.8	226.2	228.7
Capital Grants	174.3	212.5	212.5	212.5
Evaluations & Investigations***	1.0	1.0	1.0	1.0
Total Higher Education	3,570.4	3,709.3	3,840.2	3,938.8

*Adapted from Table 2.1 Resources Available for Higher Education from 1990 to 1993 DEET, *Higher Education Funding for the 1991-93 Triennium*, (Canberra: AGPS, November 1990), p. 6.

**These amounts are part of the "Total Operating Resources" figures.

***Provides funding for studies and research projects to assist in evaluating performance and investigating issues of national importance in higher education.

Queensland. For example, nursing education has attracted a $33 million state contribution for capital funding and $12.6 million for recurrent funding (1990-91). Various Queensland government departments have also financed Chairs and single research and training initiatives. The first stage of the state's Opening Learning Network commenced in 1989 with initial funding of $4 million for 1989-90 to 1990-91.

There are four specific initiatives regarding the new policy environment for funding higher education to which attention should be drawn. They are formula funding; the reintroduction of the principle of user pay; the *Training Guarantee Act*; and the differential funding of individual academics for research and teaching.

Formula funding of higher education institutions in Australia has not been explicit, and the recent introduction of a Relative Funding Model is perhaps the first public document of this kind. Its antecedents are to be found in the 1988 White Paper which foreshadowed a review of historical funding inequities. The model, which was designed to be used on a once-only basis in 1990 at the system-wide level, comprises separate teaching and research components. Some of its main characteristics include the funding of similar disciplines at similar levels irrespective of location, the treatment of research in the same way regardless of institutional type, a 3 percent "tolerance band" around the line of "best fit" between current operating grants and model allocations, and relative rather than needs-based costing.

The model does not prescribe how grants to institutions should be internally allocated, nor is it intended to redistribute resources between the former binary sectors. The adjustment process to move those "over-" or "under-funded" institutions to within the tolerance band is being implemented over the 1991-93 triennium. The full effect of intake adjustments will not be evident for at least four years. Adjustment packages generally comprise a mixture of grant and load adjustments. Under-funded institutions will be given solely cash adjustments, because substantial reductions in intakes are not an appropriate policy response. (Cash adjustments will be made primarily from a $30 million fund established to assist in the introduction of the relative funding process). In 1991 these funds will be supplemented from the National Priority Reserve Fund to ensure a reasonable injection of funds for under-funded institutions in the first year of adjustment.

The government has acknowledged that the funding model does not adequately cater for the influence of institutional size; location, including function as a regional institution; and the number and nature of different campuses. A recent report by the Higher Education Council also drew attention to the inappropriateness of using the relative success of an institution in attracting grants from Commonwealth granting bodies in any long-term allocation of the research quantum contained in the Model.[20] It is well to note that the relative

funding model clearly will not redress any problems resulting from the underfunding of the higher education system generally.

A second feature of the new funding environment is the reintroduction of the principle of user contribution or partial user pay, through the Higher Education Contribution Scheme — otherwise known as HECS. Until the decision to abolish tuition fees was taken in the euphoria of the early 1970s Whitlam era, the funding of higher education was a federal and state responsibility, albeit with a steadily increasing federal contribution. From 1974 until 1989, no tuition fees were levied, and the entire funding responsibility for higher education institutions was assumed by the federal government. A means-tested living and other allowance scheme was introduced (the Tertiary Education Assistance Scheme, or TEAS), which replaced the previous merit-based scheme of Commonwealth scholarships for undergraduates. However, the re-imposition of tuition fees was never far off the political agenda during the last 15 years, and in 1982 the then-coalition government (Liberal and National) unsuccessfully moved to reintroduce tuition fees. In 1986, the federal Labor government imposed an administration charge (as from 1987) of $250 per annum payable by all students, both Australian and overseas, except those receiving AUSTUDY (the successor to TEAS). This was discontinued when, on 1 January 1989, the HECS or the "graduate tax" was introduced.

The origin of HECS lies in the Green Paper and in the report of the Committee on Higher Education Funding (the Wran Committee)[21] which was released in April 1988. This committee investigated ways in which the government's objective of massively expanding the number of places in higher education could be financed, and particularly how "a contribution from individual students, former students and/or their parents" might be sought.[22] The HECS provides that students undertaking award courses are required to contribute to the costs of their courses, either through an "up-front" payment or through a special taxation levy recovered over a period of years when their income reaches the level of average weekly earnings. For 1989, liability was assessed at $1,800 per annum for a full-time student. Some 19,000 HECS liability exemption scholarships have been provided for post-graduate research students and school teachers upgrading their qualifications. It is important to note that the students' contribution is collected by the institutions on behalf of the federal government rather than being received directly as income by the institution. However, HECS contributions are paid to a trust fund, not to consolidated revenue.

While the government's authority to introduce this charge flowed unambiguously from section 96 of the Constitution, its determination to proceed against the wishes of a considerable body of opinion — including, significantly, many in the Labor Party itself — is further evidence of the emergence of "hard federalism."

A third initiative, the *Training Guarantee Act* (1990), also resulted in part from the Wran Committee Report. The Report emphasized the federal government's commitment to improve access to higher education for under-represented groups and to raise the level of private sector spending on education and training which was found to be well below that of Japan, the United States and West Germany. Under this Act, employers — public and private sector — with a payroll of at least $200,000 are required to spend at least 1 percent of payroll on formal training. This legislation has provided an opportunity for universities to broaden their scope of activities and client groups.

Finally, the funding of institutions and individual academic staff to perform both teaching and research functions has also come under federal government scrutiny. Despite numerous studies conducted over several decades, our understanding of the link between research and teaching in universities is far from definitive. This crucial link is still more an article of faith than a demonstrated relationship. Conclusive statements about the nature of the link — symbiotic, neutral or conflict — and how the link is effective at the level of the individual academic staff member, the discipline or undergraduate/post-graduate activities, remain beyond our grasp. The role "scholarship" plays within teaching and research is also unclear. However, with the declaration of the need for national research priorities and of the competitive allocation of research funds "to those institutions, research groups, and individuals best able to make the most effective use of them,"[23] the federal government has placed the question of whether there can be greater differentiation of function between academics and institutions squarely on the higher education agenda. So far, the response of the higher education community has centred on claims that such differentiation may challenge traditional academic freedoms and may lead to a stratification within and between universities. There are also claims from within the older universities that the quality of teaching will be undermined if the nexus between teaching and research is broken. For staff from the former advanced education sector who, unlike their university colleagues, were not in institutions funded for research, the question is whether they can and should seek involvement in research within the unified national system.

STUDENT ACCESS AND MOBILITY

Each institution is required to satisfy annual commencing and total student load targets established in the educational profile discussions, on the basis of which the Commonwealth provides financial support. Student load is measured by equivalent full-time student units (EFTSU) reflecting a weighting system. Participation of permanent Australian residents from the 17-64 year-old cohort was 3.9 percent in 1989.[24] The Higher Education Council of NBEET has recommended that "a specific target be set for the higher education participation

rate" and that "the participation rate in 1990 for the 17-64 year-old cohort (3.9 percent) be regarded as the base." What this participation rate means as regards specific age categories is not clear. However, the government anticipates that the relative proportions of different categories of students participating in higher education will alter significantly. In particular, the proportion of school leavers is likely to decrease (despite rising school retention rates) while the proportion from nontraditional and disadvantaged groups, mature-age entrants and international students will likely increase.

Of the 441,076 enrolments (including full-fee paying overseas students and basic nurse education students — the latter largely state-funded) in higher education in 1989, females accounted for just over half (229,791). The representation of the different age groups during 1989 was as follows: *19 and under* – 148,423; *20 to 24* – 126,664; *25 to 29* – 53,951; *30 and over* – 112,038.[25] Full-time students comprise some 62 percent of total student numbers, and external student numbers have increased by over 27 percent since 1983.[26] Traditionally there has been little interstate movement of students at the undergraduate level.

Current government policy on overseas students has been informed by the reports of two committees of inquiry which were established in 1983 (both of which reported in March 1984). The Jackson Committee[27] reported to the Minister for Foreign Affairs on Australia's overseas aid policy. The Goldring Committee[28] reported to the Minister for Immigration and Ethnic Affairs on a "Review of Private Overseas Student Policy." Although there were strong similarities in the recommendations contained in both reports, the Jackson Committee's recommendation that education should be treated as an export industry in which institutions were to be encouraged to compete for students and funds has had the greater impact on policy development regarding overseas students.[29] Some scholarships for overseas students were retained.

In 1990, government funding for overseas students was withdrawn in favour of a program where all overseas students pay full fees but might be eligible for a scholarship under the Equity and Merit Scholarship Scheme or the Overseas Postgraduate Research Awards. All institutions now appear to have recognized the benefits accruing from overseas students (and FFPOS income as a source of discretionary revenue). Many institutions are involved in recruiting overseas students, primarily but not exclusively in South East Asia. The recent establishment of the Australian Education Centres (under the auspices of the International Development Program of Australian Universities and Colleges — IDP) promises to provide a vehicle for sensible coordination.

It should also be noted that the federal government has identified a number of specific groups as being disadvantaged in their access to higher education and through its 1990 policy document, *A Fair Chance for All: Higher Education*

That's Within Everyone's Reach, requires institutions to develop equity plans in their educational profiles.

PLANNING AND FUNDING OF RESEARCH[30]

Australia's research effort is at a severe scale disadvantage, especially when compared with the United States and the United Kingdom. International research is both a collaborative and a competitive enterprise and Australian researchers have to be exceptionally creative and resourceful to compete. Australia's established reputation for high quality basic research no doubt reflects these qualities. However, its capacity to allocate very large amounts of money, people and time to a particular project is limited. And while Australia's research effort involves institutions and agencies other than universities and colleges, the largest part of the nation's basic research capacity is concentrated in higher education institutions.

A convenient perspective which highlights federal initiatives in the planning and funding of research is chronological, and four periods can be recognised: from 1850 to 1946, 1947 to 1964, 1965 to 1987, and 1988 to date. The first period commenced with the establishment of The University of Sydney in 1850 (when inaugurated on 11 October 1952, the University had a staff of three professors and 24 students!). Research was not a central activity of any state university in this period; it was not expected of them and such public — almost exclusively state — funds as were provided were, by and large, not intended to support research activity. Indeed, research as an activity was not characteristic of Australia as a nation until towards the end of this period. The Commonwealth Scientific and Industrial Research Organisation (CSIRO)[31] — a federal initiative — carried the main research responsibility, along with industry. Another federal initiative, the Medical Research Endowment Fund, which was established in 1937, provided support for medical research.

The second period, 1947-64, saw the establishment by the federal government of The Australian National University (ANU). John Curtin's Labor Government introduced the enabling legislation, arguing that such a national institution with a mandate for basic research and research training would enhance Australia's capacity to meet the kind of national emergency that World War II constituted. Through its research schools, the ANU has had a major impact on research activity in Australia and elsewhere.[32] This period also marked the beginning (in 1957) of major funding of universities by the Commonwealth, as recommended by the Murray Committee which emphasized the role of universities in the creation of human capital.

The third major period in the history of research and development in Australia extended from 1965 to 1987. The Martin Committee Report[33] of 1964 (another federal initiative) embodied a crucial decision with major implications

for research: an "advanced education" sector was created on the explicit understanding that institutions in it would not be funded as generously as universities because the advanced education staff members would not be expected to do research. This binary divide generated some spurious distinctions (as between institutions best suited to applied versus basic research) and also it implicitly challenged the received wisdom that a quality learning environment at the baccalaureate level can only exist where research and teaching are complementary activities.

A more general feature of this period -- in Australia and elsewhere — was the increase in the rate of acquisition and application of new knowledge. It also saw a massive expansion in student enrolments, accompanied by a dramatic increase in the number of universities and a related burgeoning of the academic staff in the new as well as in the established universities.

The decision by the federal government in 1973 to assume complete responsibility for the funding of universities from 1974 — and the concurrent abolition of tuition fees — does not seem to have had any marked implication for research policy. While the states retained the legislative responsibility for universities, there was nothing intrinsic in the 1973 decision to encourage or discourage their support of research.

In many — but by no means all — areas of physical science, medical science and technology, group research as a deliberate strategy began to emerge. On the funding side, this was reflected in the Australian Research Grants Committee's (ARGC) Program Grants, and the CTEC's Centres of Excellence, and Key Centres of Teaching and Research. This was especially the case in some of the frontier areas of the biological and life sciences such as molecular biology and genetics.

The forms and sources of research support became much more diverse. A summary impression of this is provided in Table 3. To the allocation of university operating funds were added peer-reviewed external grants (for example, ARGC, National Health and Medical Research Council); grants from public research and development corporations; contracts from governments at all levels for specific research services; contracts from private sector agencies, corporations, and individuals; and individual philanthropy.

Finally, there was a quickening interest in the quality of institutional management of research resources. In the final two years of this period, this concern found expression in two forms: first, in the *Review of Efficiency and Effectiveness in Higher Education: Report of the Committee of Enquiry*, prepared by CTEC in 1986;[34] and in the report to the prime minister in 1987 by the Australian Science and Technology Council (ASTEC), entitled *Improving the Research Performance of Australia's Universities and Other Higher Education Institutions*.[35] Both reports were explicit in calling for research management strategies. The latter in particular canvassed the notion of consolidation of

Table 3: Sources of Grants to Support Research[36]

1937	the Medical Research Endowment Fund, administered on advice of the National Health and Medical Research Council
1957	Commonwealth funding for universities through general funds, equipment grants and Special Research Grants (1963), administered by the Commonwealth Tertiary Education Commission
1965	the Australian Research Grants Scheme, administered on the advice of the Queen Elizabeth II Fellowships and Australian Research Grants Committee
1968	the Australian Water Research Council, from 1985 the Australian Water Research Advisory Council
1976	the Australian Industrial Research and Development Incentives Schemes, administered on the advice of the Australian Industrial Research and Development Incentives Board, terminated in 1986
1978	the National Energy Research Development and Demonstration Program, developed on the advice of the National Energy Research Development and Demonstration Council
1979	the Marine Sciences and Technologies Grants Scheme, administered on the advice of the Queen's Fellowships and Marine Research Allocations Advisory Committee, from 1983 the Marine Research Allocations Advisory Committee
1982	the Special Research Centres program, administered on the advice of a Committee of the Commonwealth Tertiary Education Commission, from 1987 a Committee of the Australian Research Council
1983	National Research Fellowships Scheme, administered on the advice of the National Research Fellowships Committee
1983	Queen Elizabeth II Fellowships Scheme, administered on the advice of the National Research Fellowships Committee
1985	Key Centres of Teaching and Research program, administered on the advice of a Committee of the Commonwealth Tertiary Education Commissions, from 1987 a Committee of the Australian Research Council
1986	Grants for Industry Research and Development Scheme, administered on the advice of the Industry Research and Development Board

The following schemes were subsumed within the Australian Research Council when it was established in 1988:

Australian Research Grants Scheme
Marine Sciences and Technologies Grants Scheme
National Research Fellowships Scheme
Special Research Centres Program
Key Centres for Teaching and Research Program
Commonwealth Postgraduate Awards

research funds (including some part of the general research support or infrastructure funds in the university recurrent grants) under a larger national umbrella — and so the momentum to establish an Australian research Council began to build.

Another development during this period was an increasing concern about the research infrastructure of universities. The steady decline in the funding for equivalent full-time students from the late 1970s had resulted in a number of coping strategies which compromised research infrastructure: deferred building maintenance, delayed equipment replacement, reduction in the number of support staff, etc. Attention was drawn to the problem in a number of reports from 1978 onward.[37] This period concluded with the release of the *Policy Discussion Paper on Higher Education* in December 1987.[38] This Green Paper canvassed a number of policy options, including substantial growth in higher education and related issues of funding. It also placed the need for selectivity and concentration of research squarely on the agenda.

The fourth period commenced in 1988, and was marked by the federal government's adoption of the White Paper[39] prepared by the Minister for Employment, Education and Training. This period is characterized by the dismantling of the binary system with all of its implications for higher education institutions; the challenging of the view that teaching and research are inextricably linked; the emergence of new systems of funding; a sharper sense of the real importance of research; and a growing appreciation that for relatively small countries like Australia, concentration and selectivity are essentials in any national research policy.

The key development to date has been the establishment of the Australian Research Council as one of the four subsidiary Councils of the National Board of Employment, Education and Training. This structure is contrary to ASTEC's 1987 recommendation that the Council be a statutory body. However, the Council does report directly to the minister on allocations under the various research granting programs it administers; only in policy and research granting priority matters does the Council report through the National Board. While this structure has its critics, it is grounded in a conviction that the capacity to look across the broad sweep of education, employment, research and training issues is essential to yield policy advice that will position Australia to survive and thrive in the twenty-first century.

The ARC developed a committee structure which established committees on Planning and Review, Institutional Grants, Research Training and Careers, and Research Grants. (The predecessor body, the Australian Research Grants Committee (ARGC) effectively had had only one of these, the Research Grants Committee). The ARC structure was partly a response to the increased range and variety of granting programs for which it was responsible. It also reflects a conviction that in the national research environment of the 1990s, planning

and review activities must be accorded as high a priority as the process of assessing research grant proposals.

A related development in 1988 was the appointment by the minister of a committee to review higher education research policy. The Committee's terms of reference were quite broad and addressed funding issues, personnel issues, higher education-industry interface issues, general process issues, and ARC-related process issues. The government response to the Committee's recommendations on these terms of reference included the allocation of additional infrastructure funds to stabilize at $45 million in 1992 along with the maintenance of the redirection of funds from the aggregate operating grant pool of pre-1987 universities as previously announced by the minister.[40] The government also adopted the recommendation that there be an increase in the number and level of stipend for Commonwealth Postgraduate Awards, thus meeting at least some of the concerns that have been expressed about the need to attract able young scholars to research careers. While the government declined to accept a recommendation on national career fellowships, a modified career structure for researchers that provides potentially an 18-year path from the post-doctoral level to the Senior Fellowship level for full-time researchers was established from 1990.

A particularly sensitive area relates to national research priorities which many see as threatening to the conduct of basic, curiosity-driven research. The Committee's recommendations on this subject[41] were noted by the government, and the ARC has since resolved to consult widely and openly through invited submissions as part of the process of developing priorities, before presenting them to the National Board for adoption.

The Council's view is that three questions must be addressed if a given national need or problem is to be reflected in an ARC research priority area:

1. Does the need have a significantly long time scale?
2. Does the national need possess an obvious and important research and development or research training dimension?
3. Does that research and development dimension fit the Council's essential role?

A third and final initiative during the post-1987 period was the government's May 1989 Statement entitled *Science and Technology for Australia*.[42] This was the omnibus statement for initiatives on research and development announced in several portfolios. It enunciated a strategy involving four elements:

- central role of science and technology in achieving national objectives;
- management strategy;
- human resources strategy; and
- science and technology and the wider community.[43]

An important element of this strategy was the creation of the Prime Minister's Science Council — "a major new national forum for consideration of science and technology issues,"[44] to be chaired by the prime minister and to have as its executive officer the chief scientist, who provides advice to the prime minister. A Coordination Committee on Science and Technology complements the work of the Prime Minister's Science Council at the level of officials. A major initiative from this structure was the establishment of the Cooperative Research Centre program. Administered by the Chief Scientist, the key attributes of the program are to foster excellence, applicability, and cooperation in research. It envisages the establishment of 50 centres enabling partnerships between universities, CSIRO, state-agencies and industry. The program reflects a view that the divergence in research objectives between universities and CSIRO in particular that developed in the last twenty years or so was seriously disadvantaging Australia's research effort.

CURRENT ISSUES

There are three major current issues, the precise implications of which for higher education will not be clear for some time. The first flows from the effective recognition of higher education as an "industry" in 1983 by the then (federal) Conciliation and Arbitration Commission, and the subsequent registration of the Australian Association of Academic Staff as a union in November 1986.[45] Prior to this date, academic salaries were determined by the (federal) Academic Salaries Tribunal (whose findings applied in the Australian Capital Territory and had the force of recommendations elsewhere), while various matters related to conditions of appointment were the province of state industrial tribunals. For general staff, all awards to do with salaries and conditions of appointment were registered only in state industrial tribunals.

This has resulted in formalization of relationships between higher education institutions as employers and staff associations as trade unions. As well as its implications for traditions of collegiality, this new relationship has meant that, in the final analysis, many matters to do with the academic enterprise (broadly defined) are now at risk of being resolved through third-party arbitration. Unlike the situation in Canada, the parties have little if any voice in deciding the identity of the arbitrator, who is a permanent employee of the federal Industrial Relations Commission. In addition, proceedings before the Commission frequently involve not two parties but three: the employers (the Australian Higher Education Industrial Association), the academic or general staff unions, and the federal government. The Commonwealth has a particular stake in salary matters and has made it clear that, unlike the days of the Academic Salaries Tribunal, it accepts no obligation to fully fund awards made by the Commission. It has occasionally taken strong positions on certain conditions of employment

matters, such as on redundancy and unsatisfactory performance provisions in the Second Tier Award of 1988.

The outcome of the academic and general staff award restructuring negotiations will not be known for some time. But one thing is certain: the changes flowing from higher education restructuring in the industrial arena are every bit as momentous for the academic enterprise as the changes that followed the 1988 White Paper.

The second major current issue relates to funding sources. While there has been considerable expansion of the higher education system since 1988, — with additional funding — it is clear that institutions must diversify their sources of support and become less dependent on the federal grant. This imperative was explicit in both the Green and White Papers and has resulted in a number of initiatives. Thus, more Australian higher education institutions are involved in marketing educational services overseas, either by enrolling students in Australia on a full-fee basis, delivering courses offshore or engaging in "twinning" arrangements with institutions overseas. Also, many institutions are offering certain post-graduate courses to Australian students on a full-fee basis (an option introduced in 1987), and are seeking to increase the number of sponsored students in degree and nondegree courses (especially for the corporate and government sectors). Institutions are also seeking to establish partnerships with industry to support research and consultancy activities.

The increasing interest in alumni flows from this new awareness of the need to reduce dependence on government. While it will be some years before an "alumni support culture" is well-established in Australia, many institutions are pursuing this initiative with real determination.

The final issue relates to the quickening interest in ways of delivering higher education services to client groups for whom the conventional on-campus full-time mode of study is inappropriate. Distance education delivery methods are well developed in Australia. Open Learning concepts and approaches (involving transferability between degree and nondegree programs, credit transfer between institutions, flexible entry and exit, and credit banks) are very much on the agenda, — including the federal government's agenda — and could well change the higher education landscape dramatically in the next decade.

NOTES

1. Economic Planning Advisory Council, *Towards a more Cooperative Federalism? Discussion Paper 90/04* (Canberra: Australian Government Publishing Service, 1990).
2. Federal government assistance to students is also enabled under section 51(xxiiiA) of the Constitution:

> **51.** The Parliament shall, subject to this Constitution, have power to make laws for the peace, order, and good government of the Commonwealth with respect to:
>
> **(xxiiiA)** The Provision of maternity allowance, widows' pensions, child endowment, unemployment, pharmaceutical, sickness and hospital benefits, medical and dental services (but not so as to authorize any form of civil conscription), benefits to students and family allowances.

3. *Higher Education: A Policy Discussion Paper* (Canberra: Australian Government Publishing Service, 1987).
4. *Higher Education: A Policy Statement* (Canberra: Australian Government Publishing Service, 1988).
5. R. Johnson, "Past, Future and Open Learning," in Ingrid Moses (ed.), *Higher Education in the Late Twentieth Century: Reflections on a Changing System* (Kensington, NSW: HERDSA, 1990), chap. 6, pp. 65-78 .
6. In relation to participation it is significant to note that in February of this year the Commonwealth and state ministers responsible for education and training have established a national review of young people's participation in post-compulsory education and training.
7. *Report of the Committee on Australian Universities*, Murray Report, (Melbourne: Government Printer, 1957); *Tertiary Education in Australia: Report of the Committee on the Future of Tertiary Education in Australia*, Martin Report, (Melbourne: Government Printer, 1965); *Education, Training and Employment: Report*, Williams Report, (Canberra: Australian Government Publishing Service, 1979); and *Review of Efficiency and Effectiveness in Higher Education: Report of the Committee of Enquiry*, Hudson Report, (Canberra: Australian Government Publishing Service, 1986).
8. The basis for state interest in higher education was recently described by an officer of the Queensland Office of Higher Education as follows:

   > First, [the State] has formal and legal obligations, since the institutions are created by State legislation, and responsible to [the] State parliament for the conduct of their affairs. Second, it has a direct financial investment in higher education programs. Third, the State has obligations to provide planning, development and general infrastructure for the State. And fourth, the State government has a broad political agenda which touches on many matters which affect higher education, including regional development; economic planning; and social justice; which can influence where institutions are located, what programs are given priority, how access is distributed.
   > (Leigh Tabrett, Address to a meeting of AITEA on the role of the Queensland Office of Higher Education, October 1990.)

9. Bruce Williams, "The 1988 White Paper on Higher Education," *Australian Universities Review*, 32 (1988): 3.
10. Bruce Williams, *Systems of Higher Education* (New York: International Council for Educational Development, 1978).
11. Neil Marshall, "End of an Era: the Collapse of the 'Buffer' Approach to Governance of Australian Tertiary Education," *Higher Education*, 19 (1990): 147-67.

12. Australia, Department of Employment, Education and Training, *Selected Higher Education Statistics 1989* (Canberra: Australian Government Publishing Service, 1990), table T2.
13. E. Medlin, "A Case for an Association of Australian Universities," *VESTES*, 19 (1976): 6.
14. Maurice Kogan, "Government and the Management of Higher Education," *International Journal of Institutional Management in Higher Education* 12 (1988): 5-15; H.R. Kells, "University Self-Regulation in Europe," *European Journal of Education*, 24 (1989): 299-309.
15. Berit Askling, "Structural Uniformity and Functional Diversification," *Higher Education Quarterly*, 43 (1989): 289-305.
16. Grant Harman, "The Universities of Australia," *Commonwealth Universities Year Book*, vol 1 (London: The Association of Commonwealth Universities, 1990), pp. 1-13.
17. Ibid., p. 6.
18. For example, the committee set up by then-Prime Minister Fraser in late 1980 to review all Commonwealth or federal government functions used coercion based on the "power of the purse" to achieve its objectives in higher education. This committee, known as the "Razor Gang," was able to reduce the number of CAEs by about a third through forced amalgamations. See Grant Harman, "The 'Razor Gang' Decisions, the Guidelines to the Commissions, and the Commonwealth Education Policy," *VESTES*, 24 (1981): 28-40.
19. See for example, *Discipline Review of Teacher Education in Mathematics and Science*, G.W. Speedy, Chair, 3 vols. (Canberra: Australian Government Publishing Service, 1989); and *Review of the Accounting Discipline in Higher Education*, Emeritus Professor Russell Mathews, Chair (Canberra: Australian Government Publishing Service, 1990).
20. Higher Education Council, *Higher Education: The Challenges Ahead*, December 1990.
21. *Report of the Committee on Higher Education Funding*, Wran Committee (Canberra: Australian Government Publishing Service, April 1988).
22. *Green Paper*, 1987, p. 87.
23. R.H.T. Smith, *Report of the Committee to Review Higher Education Research Policy*, Smith Committee (Canberra: Australian Government Publishing Service, 1989), p. 5.
24. *Higher Education Council*, 1990, p. 8.
25. *Selected Higher Education Statistics 1989*, table 1, pp. 27-28.
26. Australia, Department of Employment, Education and Training, "Explanatory Notes 1989-90," Employment, Education and Training Portfolio, *Budget Related Paper No. 8.6A*, p. 85.
27. *Report of the Committee to Review The Australian Overseas Aid Program* March 1984, Jackson Committee (Canberra: Australian Government Publishing Service, 1984).

28. *Mutual Advantage., Report of the Committee of Review of Private Overseas Student Policy*, March 1984, Goldring Committee (Canberra: Australian Government Publishing Service, 1984).
29. Hugh Hudson, *Overseas Students Policy in Australia, 1980-1990*, a report prepared for the Industry Commission (Canberra: 1990).
30. This section draws heavily on R.H.T. Smith, "Research in Australian Higher Education: Retrospect and Prospect," in Glenn Withers, (ed.), *Commonality and Difference: Australia and the United States* (New York: Allen and Unwin, 1991).
31. The CSIRO was established in 1949 under the *Science and Industry Research Act*. It was the successor to the Council for Scientific and Industrial Research which was established in 1926.
32. *Report of the Committee to Review the Institute of Advanced Studies of the Australian National University*, Stephen Committee (Canberra: Australian Government Publishing Service, November 1990).

    The report recommends that a new "territory" university be formed, and that the Institute of Advanced Studies be separated from its parent — the ANU — and become a free-standing national research university. See Higher Education Council, *Implications of the Stephen Report for Higher Education in the ACT*, Chubb Report (Canberra: DEET, January 1991).
33. Martin Committee, *Tertiary Education*, 1965.
34. *Review of Efficiency and Effectiveness in Higher Education*, 1986.
35. ASTEC, *Improving the Research Performance of Australia's Universities and Other Higher Education Institutions — A Report to the Prime Minister* (Canberra: ASTEC, 1987).
36. Source: R.H.T. Smith, *Report of the Committee to Review Higher Education Research Policy*, 1989 (Canberra: AGPS, 1989), table 3.2, pp. 83-84.
37. Ibid., Appendix 3, pp. 182-88.
38. *Higher Education: A Policy Discussion Paper*, 1987.
39. *Higher Education: A Policy Document*, 1988.
40. *Higher Education: A Policy Document*, 1988, p. 83. *Higher Education Funding for the 1988-91 Triennium* (Canberra: Australian Government Publishing Service, 1988), p. 28.
41. Recommendations 4-1 and 4-2 of the Smith Committee, 1989, p. 9.
42. R.J.L. Hawke, and B.O. Jones, *Science and Technology for Australia* (Canberra: Australian Government Publishing Service, 1989).
43. *Science and Technology for Australia*, 1989, p. 9.
44. *Science and Technology for Australia*, 1989, p. 20.
45. Keith Hancock, "Industrial Relations in Tertiary Education," paper delivered to the AITEA Conference, Auckland, New Zealand, 26 August 1989. (Professor Hancock is a Deputy President of the Industrial Relations Commission; he was formerly the Vice-Chancellor of the Flinders University of South Australia).

APPENDIX
Australian Higher Education Institutions (as of November 1990)*

(A) EXPECTED MEMBERS OF THE UNIFIED NATIONAL SYSTEM IN 1991

State/Territory	Merging/Amalgamating Institution
Australian Capital Territory	
Australian National University	– Canberra Institute of the Arts
University of Canberra	– Formerly Canberra College of Advanced Education
New South Wales	
Charles Sturt University	– Mitchell College of Advanced Education
	– Riverina-Murray Institute of Higher Learning
Macquarie University	– Institute of Early Childhood Studies (Sydney CAE)
University of Newcastle	– Hunter Institute
	– NSW Conservatorium of Music (Newcastle Branch)
University of New England	– Armidale College of Advanced Education
	– Northern Rivers College of Advanced Education
	– Orange Agricultural College
University of New South Wales	– City Art Institute (NSWIA)
	– St George Institute of Education (SCAE)
University of Sydney	– Cumberland College of Health Sciences
	– Sydney College of the Arts (NSWIA)
	– NSW Conservatorium of Music (Sydney Branch)
	– Sydney Institute of Education (Sydney CAE)
	– Institute of Nursing Studies (Sydney CAE)
University of Technology, Sydney	– Kuring-gai College of Advanced Education
	– ITATE (Sydney College of Advanced Education)
University of Western Sydney	– Hawkesbury Agricultural College
	– Macarthur Institute of Higher Education
	– Nepean College of Advanced Education
University of Wollongong	
Northern Territory	
Northern Territory University	– Darwin Institute of Technology
	– Northern Territory University College

APPENDIX (continued)

Queensland	
Griffith University	– Brisbane CAE (Mt Gravatt campus only) – Gold Coast CAE
James Cook University	
Queensland University of Technology	– Brisbane CAE (other than Mt Gravatt campus)
University College of Central Queensland	– Capricornia Institute of Advanced Education
University College of Southern Queensland	– Darling Downs Institute of Advanced Education
University of Queensland	– Queensland Agricultural College (Gatton)
South Australia	
University of Adelaide	– Roseworthy Agricultural College – City campus, South Australia CAE
Flinders University of South Australia	– Sturt campus, South Australia CAE
University of South Australia	– SACAE's Sturt campus will amalgamate with Flinders University; City campus with Adelaide University; SAIT plus Magill, Underdale and Salisbury campuses of SACAE will become part of the new University of South Australia — SAIT will become part of the University of South Australia
Tasmania	
University of Tasmania	– University of Tasmania – Australian Maritime College – Tasmanian State Institute of Technology
Victoria	
Deakin University	– Warnambool Institute of Advanced Education
La Trobe University	– Bendigo College of Advanced Education – La Trobe University College of Northern Victoria – Wodonga Institute of Tertiary Education
Philip Institute of Technology	
Monash University	– Chisholm Institute of Technology – Gippsland Institute of Advanced Education
University of Melbourne	– Melbourne College of Advanced Education – Victorian College of Agriculture and Horticulture – Victorian College of the Arts – Hawthorne Institute of Education

APPENDIX (continued)

Victoria University of Technology	– Footscray Institute of Technology – Royal Melbourne Institute of Technology – Western Institute
Ballarat University College	– Formerly Ballarat College of Advanced Education
Swinburne	– Negotiating with a number of universities
Victoria College	– Negotiating with Deakin University

Western Australia

Curtin University of Technology	
Murdoch University	
University of Western Australia	
Western Australian College of Advanced Education	– Designated university status as the Edith Cowan University

Other

Australian Catholic University	– Catholic College of Education, Sydney – Institute of Catholic Education, Melbourne – McAuley College, Brisbane – Signadou College, Canberra

(B) NON-MEMBERS OF UNIFIED NATIONAL SYSTEM IN 1991

Government Funded Universities

Victorian College of Pharmacy	– Negotiating with Monash University
Avondale College Queensland Conservatorium of Music	
Batchelor College	
Marcus Oldham	

Private Institutions

Bond University

Notre Dame University, Australia

William Simon University

*Adapted from a table prepared by the Australian Vice-Chancellor's Committee

Higher Education in Federal Systems: Switzerland

Augustin Macheret

SWITZERLAND: UNIFIED AND DIVERSE

Switzerland, with an area of some 41,300 square kilometres, is situated in the heart of Europe. It shares its borders with Germany, France, Italy, Austria and the Principality of Liechtenstein. Its population is approximately 6,700,000. Foreigners make up about 15.5 percent of the population (21 percent of the working population). Switzerland is multicultural and has four linguistic regions. About 65 percent of the population speaks German, 18.4 percent French, 9.8 percent Italian and 0.8 percent Romansch; 6 percent, mainly foreigners, have some other mother tongue.

An important clarification: German-speaking Swiss usually speak *schwyzertütsch* (German Swiss), a dialect derived from "correct German" with numerous variations. This fact inevitably presents communication problems that sometimes are solved — by using English! Nor are the Swiss united in their religious denominations — 47.6 percent of the people are Roman Catholic, 44.3 percent are Protestant, 6 percent belong to some other denomination, while 7.5 percent state that they practise no religion.

All this being so, this small country, an agglomeration of minorities, could not have been created, could not subsist and develop, except within the framework of a federal political organization. Created in 1291 from the alliance of three alpine communities — Uri, Schwytz and Unterwald — against the Hapsburg empire, Switzerland developed into a federal state of 23 cantons (three of which are divided into demi-cantons). Between 1291 and 1848, it was actually only a confederation of states, often shaken by internal conflict. In 1848 it was constituted as a federal state. The cantons, with a few exceptions, suddenly lost their external sovereignty and many important activities became the responsibility of the federal state, with the watchword *One law – One army*. Since then,

many constitutional reforms have been instituted, leading to reinforcement of the central power. The cantons' sphere of activities is still substantial, particularly in the fields of education and culture.

DIVISION OF RESPONSIBILITIES IN THE FIELDS OF TRAINING AND CULTURE: A GENERAL OVERVIEW

The division of responsibilities between the Confederation (the term used for the federal state) and the cantons is the big issue in Swiss federalism. The key is provided to us in article 3 of the federal constitution, which establishes the following principle: *The cantons ... exercise all rights which are not entrusted to the federal power.* Despite all the centralization that has taken place, this general clause concerning responsibility of the cantons has symbolic value. In the lands of the Helvetians, one does not fool about with symbols! All the same, in the politically sensitive fields of training and culture, the constitution gives to the federal state only certain specific responsibilities. In large measure, these fields thus are still part of the original and traditional responsibilities of the members of the union.

Adopted in 1874, article 27 of the constitution only entitled the Confederation to set up, in addition to the existing polytechnical school, a federal university or other institutions for higher education or to subsidize such institutions. Moreover, the cantons were obliged to provide adequate free primary education and to guarantee freedom of conscience and religion in compulsory cantonal schools.

With the new economic order that followed World War II, the Helvetian sovereignty, that is, the Swiss people and the cantons, transferred to the Confederation, through article 34, adopted in 1947, the responsibility for general regulation of vocational training in industry, crafts, commerce, agriculture and domestic economy. At present, it is still the only training sector that is centrally regulated through federal legislation.

In 1902, article 27, concerning federal subsidies for primary education, was added to the constitution. This provision was abrogated by popular vote on 10 March 1985, in the context of a reworking of our extremely complex, and sometimes confusing, division of responsibilities. On the same date, the Confederation retained a responsibility assigned to it in 1963 — to give the cantons subsidies to cover their expenditures on study grants and other financial aid to education. In all cases, the autonomy of cantons with regard to education was respected. Federal manna is always welcome; but the last thing the Swiss want is an educational bailiff coming from Berne!

On the basis of the federal responsibility for universities, as set out in article 27 of the constitution, the Confederation, through legislation on aid to

universities, was given the obligation in 1968 to support cantonal universities, as well as the federal polytechnical schools which it runs and finances directly.

Scientific research, which is essential for a country with no other raw material but its grey matter, was the subject of an important constitutional provision in 1973:

> The Confederation shall encourage scientific research. Its funding may be conditional on coordination being guaranteed. It can create research establishments or take over existing establishments either entirely or in part.

On this basis, federal legislation on research regarding funding, promotion and coordination, was adopted on 7 October 1983.

Beyond this, the Confederation's responsibilities can be summed up as follows:

- It regulates the practice of gymnastics and sports in the schools;
- It regulates access to medical faculties and to federal polytechnical schools, thus having a great influence on the *maturité* exams and the educational curricula in the gymnasiums;
- It supports Swiss schools in other countries;
- It supports, through legislation on disability insurance, the training and integration of handicapped children and adolescents;
- Recently it has encouraged, through special financial assistance, the continuing education of adults.

It is important to note that when legislative responsibility falls to the Confederation, the latter will decree the necessary provisions and will often give the task of executing them to the cantons, or in exceptional cases to private institutions. The cantons thus remain responsible in large part for schools that are not directly under their legislative authority. Their position is stronger still because the Confederation consults them in the course of working out legal texts. The cantons themselves generally give to the communes (local communities) the task of creating and maintaining certain types of schools, among them kindergartens and compulsory schools. Switzerland has some 3,000 communes, more or less autonomous, depending on the canton, which are an extension of our federal system at a sub-cantonal level.

As one might expect, decisions on educational matters in our country are made at various levels and by numerous agencies. The division of tasks and the administrative organization — with no single apparatus directing the system as a whole — often depend on historical precedent and do not always respond to internal logic. But what is illogical is not necessarily a bad thing. While recognizing that it may be difficult to comprehend, this complex structure has many advantages. These were recently recognized by OECD experts in their painstaking examination of our national education policy.[1]

The cantons consider their sovereignty in educational matters to be an essential element of their political and cultural identity. This concern for identity is primordial in a multilingual and multicultural country where, moreover, the demons of *Kulturkampf* (with denominational undertones) still sleep only lightly. The structure also allows our cantons to organize and orient their education systems according to their own measures — subject, of course, to the imperatives of educational coordination — taking into account their social, economic, cultural and spiritual environment. Of course, the same level is not achieved everywhere, but the overall average is adequate. Above all, schools can reflect cultural and regional characteristics. This is enough for our ideals to be as high as our mountains at times and as narrow as our valleys.

To correct the possibly too "cantonal" image of our education scene as just presented, it is important to stress the great progress that has been made, particularly in French-speaking Switzerland, towards coordination, harmonization and cooperation in education. Under the influence of federal regulation, the *baccalauréat* has become uniform in content and profile. Today, the higher education sector is doubtless the area seen to be the most in need of greater openness on a national and international scale.

Having moved a good 30 years or so ago into the sphere of European cooperation and integration, Switzerland and the Swiss are in the process of changing from a rather introverted approach to an outward-looking federalism. There is a move to strengthen links with the European Community through the creation of the European Economic Space (EES), a likely prelude to Switzerland's joining the European Community (EC).[2] In the context of this systematic overall rapprochement with the Europe of Brussels, free movement of persons will take on a new value; so-called accompanying policies will be defined and progressively implemented, especially in the areas of research and development, education and training. This means that some federal and cantonal powers will be affected by EES regulations and eventually by European Community law. Examples of these are: determination of conditions for access to higher education, recognition of diplomas, academic mobility and study grants.

Is this a loss for federalism? No, not if becoming part of a community on a supranational scale is accomplished while respecting the principle of subsidiarity. People express fears of "bureaucratic centralism" which, they often agree, is characteristic of the European Community. These fears are shared in Switzerland only in part, for the completion of the European single market and the setting up of the European Union is accompanied in various places by a resurgence of regional sensitivities and autonomy (this is notably the case for the *Länder* in Germany) and a renewed vitality in cross-border regions. The European Community is, after all, no stranger to federalist thinking. One is inevitably struck by the similarity of political inspiration that led the Swiss

Constituante in 1848 to create a federal state and those that motivate the builders of the European Community today. The Swiss hope that European federalism will not be built on the nation-state model, but will be built on an authentic federalism that we would practise, as it were, at an additional level.

HIGHER EDUCATION IN SWITZERLAND

Overview of the Higher Education System

Higher education in Switzerland includes the universities and the *hautes écoles*, which are similar to universities, as well as many nonuniversity institutions such as the Écoles normales supérieures, the *Écoles techniques supérieures* (ETS, schools of engineering), the *Écoles supérieures pour cadres de l'économie et de l'administration* (ESCEA), the *Écoles supérieures des arts appliqués* (ESAA), the *Écoles d'assistants sociaux et d'éducateurs spécialisés* (CSESS/CSEES),[3] and other institutions for higher vocational training. There are many *Écoles supérieures* for management; these are essentially operated by the private sector.

It should be noted that the professional associations can organize both professional and advanced examinations, which are recognized by the Confederation. They establish the regulations for these and submit them to the federal authorities for approval. The professional examinations verify whether the candidates have the knowledge and competencies required to hold managerial positions and to carry out professional duties that require a level of training beyond apprenticeship. The advanced professional examinations establish whether the candidates are prepared to assume high-level responsibilities, especially at the head of an enterprise. Candidates who are successful in these examinations are awarded legally protected federal titles. Preparation is done independently but some courses are organized, notably by professional associations, private schools and other official institutions working in the field of training. Proof of the importance of this associative structure is that no less than 2,500 to 3,000 persons successfully pass the advanced professional examinations each year and 2,000 the professional examinations.

We should point out that the great diversity of alternative nonuniversity institutions offering higher training explains in part the fact that Switzerland — with the possible exception of Zurich — has up to now been able to avoid the mass university and its problems. Moreover, some of these other institutions often link nonuniversity tertiary education and the universities and polytechnical *hautes écoles*. A good example of cooperative federalism is that six regional Computer Integrated Manufacturing (CIM) centres are now being set up in our country, as well as a good number of centres in the cantons for promotion of

new CIM technologies.[4] The ETS, the universities, and the *hautes écoles*, as centres of competency, are among the partners of these future training centres.

The Universities

Large or small, in the mountains or on the plains, in town or country, rural or very industrialized, rich, economically disadvantaged or with average economic strength, the Swiss cantons are further divided — *summa divisio*! — between cantons with universities and those without. The eight cantonal universities in our country are the Universities of Basel, Berne, Fribourg, Geneva, Lausanne, Neuchâtel and Zurich, and the Haute École de St. Gall. The University of Basel, founded in 1460, is the oldest. Generally preceded by long-establishedacademies, the other cantonal universities were created in the nineteenth century and one, Neuchâtel, at the beginning of this century (1908). Apart from the University of Zurich, with more than 20,000 students, and the University of Geneva, with some 14,000, our universities are small or medium-sized. The Confederation is directly responsible for our two *Écoles polytechniques fédérales*, one in Zurich, with some 15,000 students, and the other in Lausanne, with approximately 4,000 students. The ten universities and *hautes écoles* in Switzerland have more than 83,000 students, about 10 percent of young people in the age group corresponding to completion of gymnasium studies, which ordinarily last seven years.

Major Recent Changes

The changes experienced by our universities and *hautes écoles* naturally fall into a general context. Starting in the 1950s, they had to face and participate in constant, then ever more rapid, development of research methods and techniques. Progress in science, unprecedented in several fields, led them to diversify their programs, without becoming overly specialized. The university exists within a society which provides it with funds and which makes its demands. Moreover, our universities and faculties have been given, in addition to their primary, indissoluble missions of teaching and research, a multifaceted complementary service function. Whether they like it or not, the universities are open to new publics and have new partners. They are increasingly more involved in contracts, especially with the business world.

Another significant fact is that for a good 20 years, democratization of studies has favoured much broader access to higher education. In particular, ever increasing numbers of female students are entering the faculties. Necessary and heartening as this may be, this double phenomenon often causes the university to deal with the most urgent things first, that is, problems that are mostly

quantitative, such as lack of space, classes that are too large, changes in the numbers of training personnel, overloading of teachers and so on.

Paris was certainly the epicentre for May 1968 — Pentecost for some and bacchanal for others — but for us it resulted in some changes in teaching methods and establishment of an advanced scheme for participation by students and middle-level staff. Instituted at all levels in accordance with regulations, this form of university democracy serves to make the student and the assistant lecturer responsible and can be a sign of openness. Here and there it shows signs of running out of steam.

From the ideological point of view, we live in a very different society today from the one in which our universities were created. Apart from a few convulsive movements, the twitchings of *Kulturkampf* belong for the most part to the past. For all that it is largely secularized, the hallmark of this society is ecumenism. Economic development, to which the universities have made a significant contribution, has transformed the social and cultural landscape. This option is quite widely shared: the university must continue to promote rigorous scientific training, imbued with a humanism that includes the cultural and spiritual dimension of humankind.

Another underlying theme is that our universities have remained true to their international tradition. As this century ends, this tradition is more dynamic owing to the process of integration throughout Europe. To increase their chances of success and lessen the load of capital costs, scholars and scientists are called upon to coordinate still further their efforts at the national and international level. The trend among universities is to increasing mobility (exchanges of students, researchers and teaching staff) and to membership in a vast computerized network of scientific information. A sudden, unexpected and spectacular event puts us again in a situation similar to that following World War II: the rebirth of the Central and Eastern European countries in freedom and democracy. Suddenly our relations with many prestigious universities are taking on new vigour.

Autonomy of Universities

While the *Écoles polytechniques fédérales* are regulated by federal legislation which has given them their own structures, the cantonal universities derive their status from organic cantonal laws. These give the institutions a judicial character and effectively declare them to be autonomous "within the limits of the law." This reservation leads us to all the legal and regulatory prescriptions that control relations between the university and the public powers. All things considered, our universities, which are public institutions with many corporate traits, enjoy a fair degree of autonomy. This is particularly the case in the area of academic affairs. In regard to equipment and finance — specific patrimony aside — this

autonomy will inevitably lessen. However, each university is required to work out and propose multi-year development plans and to establish an annual proposed budget.

Since costs have increased considerably over the last 30 years, two major themes stand out and continue to dominate Swiss university policy of recent decades:

- Interuniversity coordination and cooperation; and
- Joint funding of the universities by the Confederation and the cantons.

Let us point out again that our universities are themselves federated structures in essence and in the spirit of European tradition. They are communities of communities, extremely complex and heterogeneous entities made up of faculties, sections, institutes, seminaries, research groups and chairs, not to mention the solitary researcher, who is becoming increasingly rare.

The university: a community of communities. In this regard, let us remark that the professor, the scientific collaborator, the librarian, the lab assistant, the secretary and the student will first and foremost be citizens of their faculty, section or institute and only at a secondary level will they have a feeling of belonging to the larger community, the university community. The faculties cultivate their traditions; they maintain links with their sister faculties, in Switzerland and abroad, and with their alumni. When necessary, the faculty spirit will vigorously assert itself, against the rectorate, the university administration, or the state, suspected of hatching some unnecessarily centralizing plan. The usual channels will not always be followed; in a particular situation, one may prefer to go directly to the top!

Clearly, one of the dominant traits of our university society is a profound attachment to federalist forms and methods. That being said, a good university organization can only be decentralized and participatory. Consequently, the central bodies will naturally be disposed to give greater importance to cooperation, persuasion, and the search for consensus rather than rule by decree. The rector, the vice-rectors, the administrator and the deans, may invest much more time in consulting, sharing information, looking for negotiated solutions and coordinating interests, but they must make decisions (if they have the ability) when the resources of dialogue have been exhausted and the interests of the institution demand it.

We cannot ignore the fact that our internal federalism, a source of dynamism and creativity, also carries within it the seeds of disintegration and inefficiency. In this splintered universe of only slightly interdependent cells, being multidisciplinary has a difficult time making inroads. How long will the institution known as the university maintain (completely relative) control over its scientific and cultural development, without increasing its capacity for initiative,

action and reaction? Within the state, society has problems; the university has its faculties.

THE CONFEDERAL ROLE OF THE UNIVERSITIES

Out-of-canton Students in the University Community

"Confederal" and "of national importance" are the two best ways to describe our cantonal universities and our polytechnical schools. The first refers to the fact that they take in each year a large number of students from other cantons: in the winter semester of 1990-91, these students made up 55.4 percent of those attending the University of Fribourg.[5] As to recruitment of teaching staff, this is done on a national and international scale in our universities. The quality and degree of our universities' confederal relations is expressed also in the great loyalty of many alumni, some of whom are members of academic societies. The links maintained with authorities, colleagues, and cultural and social institutions in other cantons are obviously of importance.

Funding by the Confederation and the Cantons

By adopting legislation in 1968, in regard to federal aid to universities, the Confederation clearly recognized that the cantonal universities serve a national purpose. Provisionally instituted in 1966, this aid has given our universities basic subsidies, and subsidies for capital expenditures, without which it would be difficult for them to meet their steadily increasing responsibilities. Basic subsidies for operational costs are paid annually for the coming university year. Unfortunately, they presently cover only 16 percent of the average cost of running our institutions. This percentage is deemed to be clearly insufficient by the cantons having universities, they would like to see it increased to 25 percent. As for subsidies for capital costs (or equipment), they are earmarked for specific projects. The amount varies according to the financial resources of the canton concerned and covers 35 percent to 60 percent of costs.

Over the last ten years, the Confederation has intervened financially, with extraordinary subsidies, to support certain specific developments: training and research in informatics, continuing education, ecology and environmental science studies, renewal of exchanges with Eastern Europe, and university mobility both in Switzerland and internationally. Our universities have been pleased to be able to benefit from this special aid. The concern is that these subsidies are related to sunset programs of a targeted nature, subject to a provisional time limit (six years). When this time is up, funding from the cantons should take over, unless the federal funding is renewed. Obviously, by using targeted

subsidies, the Confederation is positioned to influence scientific development in the universities to a certain extent.

Intervention by the Confederation to promote scientific research is essential; it is done mainly with the use of the *Fonds national de la recherche scientifique* (FNRS).

In 1979, there was a victory for confederal solidarity: the conclusion of the first intercantonal agreement on participation in funding of universities. Since this agreement came into effect on 1 January 1981, the cantons with universities have received payments from other cantons which send students to them; they are calculated annually on a per capita basis. Renewed in 1986 for a further six years (1987-92), the agreement set the contributions as follows: 1987 — 5,000 Fr. per student; 1988-89 — 6,000 Fr. per student; 1990-91 — 7,000 Fr. per student; and 1992 — 8,000 Fr. per student. The future of the agreement is assured for 1993-98 but will be managed differently: the amount per student, per year will be 8,500 Fr. Payment will not be obligatory for students registered for more than 16 semesters. Starting in 1994, the amount will be adjusted to cost increases.

The future of our relations with the cantons not having universities is found to evolve further. Some intend to become more involved in defining university policy or in having their own university infrastructure. It is certain that partnership will increasingly be the hallmark of these relations.

Agencies for Coordination and Cooperation

The 1968 federal legislation concerning aid to universities established two agencies with specific mandates. The *Conseil suisse de la science* (CSS) was established as a federal government advisory body for important questions of scientific and university policy.[6] The *Conférence universitaire suisse* (CUS), conceived as a *common* agency of the Confederation, the cantons, and the universities.[7] Created by federal public law, this co-operative structure is not, however, a "federal agency." Independent of the federal administration, a secretariat of twelve people devotes itself to turning the wheel of this complex system of agencies and temporary and permanent commissions, which are generally composed of professors and specialists in university management. Thanks to the total professionalism which the CUS brings to its task, (and which will be difficult to sustain) it is able to deal together with its committee, its secretariat and its array of commissions, and, at little cost, with a great number of important issues: access to education, research, new scientific staff, funding for universities, continuing education, welfare of students (housing, grants and so on), construction at universities, medical and other types of training, computerization, libraries and documentation centres, academic mobility, environmental concerns, etc. The CUS primarily does studies and projections. It plays

a commendable role in multi-year university planning, mainly through the intervention of its permanent planning commission.[8]

In the federalist perspective of the Kingston colloquium for which this chapter has been prepared, the *Conférence universitaire romande* (CUR) deserves particular mention. Its members are the French-speaking Swiss cantons (Geneva, Vaud, Valais, Fribourg and Neuchâtel) as well as Berne and Ticino. In this framework, a general convention and about 15 specific conventions have brought about an important program of interuniversity coordination and cooperation, especially at the graduate level. A sign of the times is that an agreement was signed on 25 September 1990 between the *Conférence universitaire romande* (CUR) and the *Conférence universitaire Rhône-Alpes* (CURA), to promote cross-border cooperation between the university members of the two conferences (six institutions on the Swiss side, totalling some 30,000 students and 12 institutions on the French side, with some 126,000 students). Among the principal goals are the opening up of the existing or projected graduate programs to the entire network; organization of interuniversity programs for continuing education; establishment of a network of data banks for research and computerization of libraries, etc.

A prediction by Denis de Rougemont thus is coming to pass in the university area: the regions of Europe are organizing themselves, especially the cross-border regions. In the Basel region, this phenomenon is both of longer standing and more notable. That being said, we note with regret that German-speaking Switzerland does not yet have any organization comparable to the CUR. Discussions have taken place from time to time on the subject, in the framework of the *Koordinationskonferenz der deutschschweizerischen Hochschulen*, a conference with no structures nor ongoing activities.

Another remarkable achievement is the launching of another agency for interuniversity cooperation: the *Conférence des recteurs des universités suisses* (CRUS). Dating from 20 December 1989, this group succeeded in adopting, after some very arduous debates, an agreement aimed at promoting mobility between universities within the country. This convention came into effect in the fall of 1990 and initially worked on drawing up and regularly updating a list of the qualifications for access to higher education. The part of the list that is common to the various universities should progressively expand. The convention's aim is to recognize, through general agreements between disciplines or through particular agreements, semesters attended and examinations passed in other Swiss universities. It also proposes the creation of the status of guest student. As well, it aims to guarantee access, on the basis of a degree or diploma obtained in one specific university, to training that would lead to a higher academic level — a doctorate, for example — in another university. At this time, the Swiss mobility convention has already been the subject of some agreement in its application, in the fields of physics and computerization.

These particular agreements are noteworthy in that they introduce the system of units of credit that are transferable from one university to another. One of the pillars of the European program "ERASMUS" (European Action Scheme for the Mobility of University Students) is the European Community Course Credit Transfer System (ECTS), inspired by the system in the United States. It consists in giving a number of points (units of credit) to a block of studies (courses) instead of certificates. The ECTS allows these credits to be accumulated in one or more host universities. The federal assembly decided to give financial support to reciprocal recognition of study credits and mobility in Switzerland, notably with the creation of a grants program (ERASMUS-SUISSE grants).[9]

Some final points: revision of the federal legislation on aid to universities is almost completed. The aim is to simplify administration of the files relating to financing and to strengthen the mechanisms for coordination. Furthermore, the Confederation intends to examine the possibility of its assigning extraordinary funds to developments deemed to be of national importance, an approach that is already arousing a certain amount of scepticism in the cantons. The *Office central universitaire suisse*, an organization reporting to the *Conférence des recteurs* (CRUS), has just been given a general task of providing information on, and even centralized management of, national and international mobility programs. Switzerland intends to equip itself to meet the challenges of the future. To this end, one reform should still, in our opinion, be undertaken: the rationalization of the mechanisms for dialogue and cooperation, through integration of the existing organizations (CUS, CDIP, CRUS, etc.).

TOWARDS INTERNATIONAL ADVANCEMENT OF THE FEDERALIST IDEAL

It has already been stressed that our universities are being called on to act increasingly in accordance with the ideal of cooperative federalism at the international level. With this in mind, they have already strengthened and enlarged their bilateral interuniversity cooperation network. With regard to multilateralism, our universities are members of the International Association of Universities (IAU), the Standing Conference of Rectors and Vice-Chancellors of European Universities (CRE), the *Association des universités entièrement et partiellement de langue française* and the *Université des réseaux d'expression française* (AUPELF — UREF). These provide us with platforms to establish useful contacts and become aware of realities existing in universities beyond our borders.

At a time when the European Community is taking shape as a vast area without borders, the Swiss universities are wondering about their international future. It does not escape their notice that the initiatives taken in Brussels are

very wide-ranging. They are intended to create an increasingly closely-knit cooperative network in the areas of research, training, technology transfer and culture. Concretely, they have given rise to the creation of a whole series of programs capable of giving impetus to scientific and technological co-operation, as well as promoting free movement of teaching personnel, researchers, students and graduates.

Some Community programs are: COMETT, a program for technology training and cooperation between universities and business; LINGUA, which promotes learning of foreign languages; SCIENCE, an expanded form of a program to stimulate international cooperation and exchanges necessary for European researchers; and the ERASMUS program, intended to promote mobility among universities. Along with others, these programs are enjoying a great deal of success. We note that, while funds available are still limited, the beneficiaries of the ERASMUS grants, for example, are presently victims of this success. This Community policy has developed surprisingly rapidly. With the problems that it intends to resolve, such as mutual recognition of diplomas, it challenges the universities within and outside the Community. The non-member countries should take notice that they must intensify their efforts towards openness.

The Swiss Confederation, it is true, participates completely independently in the activities of a large number of European organizations for scientific and technological cooperation, for example the European Space Agency (ESA), the *Laboratoire européen de biologie moléculaire* (LEBM) and the European Nuclear Research Centre (CERN).

Switzerland is also involved in several projects and programs for open cooperation: EUREKA, which aims to strengthen cooperation between business and research institutes in the area of leading-edge technologies; COST, a flexible framework agreement for applied research projects in various sectors (tele-informatics, telecommunications, transport, new materials, environmental protection, bio-technology, and so on).

There are also several Community programs that have become available to Switzerland and other Member States of the European Free Trade Association such as RACE — telecommunications; ESPRIT — information technologies; SCIENCE and COMETT. In February 1991, an agreement was reached concerning our participation in the ERASMUS program. As noted above, this program supports interuniversity exchange programs for students and faculty. It awards mobility grants, which cover the supplementary costs of changing universities. It stimulates the provision of information and guidance on admission requirements. The European Community Course Credit Transfers (ECTS) system is one of the essential tools for achieving the desired mobility.

Rarely in their history will the Swiss universities have found themselves facing so many major challenges on the national and international scale: more openness, better coordination, increased cooperation, harmonization of

conditions for admission to higher education and reciprocal recognition of periods of study, examinations, diplomas and degrees. We must avoid being hemmed in geographically for that could lead to a decline in the recognition of our system, a situation that would be wholly undeserved.

Isolated we shall certainly not be, as long as the Swiss university milieu takes full stock now of the pitfalls and the stakes, and implements strategies for openness based on the principle of trust. There will be further participation in education and mobility programs in the framework of, or alongside, the European Economic Space (EES), now being negotiated — in the expectation of membership in the European Community. The federal authorities are in the course of adopting a series of measures that give us hope that the international dimension of our universities and research centres will be preserved and strengthened.[10]

That being said, we must recognize that the changes taking place do give rise to some qualms and questions. Could mutual recognition of diplomas, largely free from material assessment, not become generalized to the detriment of quality of training? Could systematic encouragement of mobility among universities not lead to academic tourism or prolonging of duration of studies? Might the institutions for research and higher training not find themselves too constricted in the future by the still essentially economic goals of the Treaty of Rome, at the cost of the social sciences? The latter are only taken into consideration in the context of certain European programs to the extent that they relate directly to a technological project.

Another concern that is heard is that the short term could take precedence over the medium and long term, the applied over the fundamental, the technical over the social. It is even possible that certain powerful enterprises could end up, if the scholar or scientist does not take care, drawing the university or the scientific research institute into its orbit or, alternatively, turning them into parasites. These institutions must remain at the service of freedom of research and knowledge. These reefs and risks of drifting — which we already see in the one national plan — should not be reasons for a wait-and-see policy. However, the universities must be watchful. The only fear that we truly have, rightly or wrongly, is that of seeing the European Community gradually turn into a bloc. The intellectual view of Europe cannot be that it is solely or mainly Western Europe, with the Community members here and the others over there. Moreover, strong in its tradition of universality, Europe must remain open to the whole world.

NOTES

1. OECD, *Examens des politiques nationales d'éducation, Suisse I* and *Suisse II*, Reports published by the Conférence suisse des directeurs cantonaux de l'instruction publique (Berne: CDIP, 1989).
2. Report of the *Conseil fédéral* on the position of Switzerland in the European integration process, 14 August 1988; Information report of the *Conseil fédéral* on the position of Switzerland in the European integration process, 26 November 1990.
3. The number of students attending various nonuniversity tertiary level schools in 1986-87 was 12,838, of whom 9,323 were at the various cantonal engineering schools (ETS).
4. More precisely, CIM is a form of enterprise management where all tasks, from the design of the products to their shipping, including manufacture of components, assembly, storage, handling, and quality control are managed and controlled by a central computer or a hierarchy of integrated computers. The "integrated factory" is what is aimed for in the future.
5. It should be said that the particularly high number of out-of-canton students attending this university, which is at the junction of German-speaking Switzerland and the Switzerland of Romance languages, is explained by its officially bilingual, even multilingual, character. This is rare in Western Europe.
6. In 1989, the *Conseil* distinguished itself with the publication of two important reports: *La place scientifique suisse, Horizon 1995* (Objectives of Swiss research policy); and *La place universitaire suisse. Horizon 1995* (Perspectives on university development for the 1992-95 planning period).
7. In its plenary form, this agency is much too large to be effective. The *Comité de la Conférence universitaire suisse* (CUS) alone is made up of directors of public education from each of the cantons with universities; one director of public education from a canton without a university, designated by the *Conférence des directeurs de l'instruction publique* (CDIP); the chairman of the *Conseil des EPF*; four university rectors, designated by the *Conférence des recteurs des universités et haute écoles de Suisse* (CRUS), as well as a student representative designated by the *Union nationale des étudiants suisses* (UNES).
8. In conformity with the acts concerning aid to universities (LAU) and research (LR), each university must establish a four-year development plan. Based on this, the *Conférence universitaire suisse* (CUS) works out, through the agency of its permanent planning commission, the multi-year plan for Swiss universities. At the national level, this operation has two main goals: to contribute to better co-ordination in Swiss universities and to determine their financial needs. At the university and canton level, the multi-year development plan is a useful, even indispensable, tool for direction and negotiations (budgetary). Thoroughly worked out, from top to bottom and vice versa, the plan forces the university to reflect on its future and to set priorities. The University of Fribourg has just worked out its third development plan, for the 1992-95 period. The following main priorities were set out: encouraging research, making new premises available, ecology and

environmental sciences, furthering continuing education, strengthening the University's international dimension, inter-disciplinary, increasing involvement in the study of ethical questions and encouraging women to enter the university. On this point, our country's universities and *hautes écoles* can only improve.

9. These measures were set out in the message of the *Conseil fédéral* supporting federal judgements aimed at promoting international cooperation in higher education and mobility, of 17 September 1990.

10. Message and federal judgements cited above. These measures are:
a) Switzerland will be a signatory of the *Council of Europe's five conventions on universities*: no. 15 Convention européenne relative à l'équivalence des diplômes donnant accès aux établissements universitaires (1953), with two declarations relative to its application (1976 and 1989) and an additional protocol (no. 49, 1964); no. 21 Convention européenne sur l'équivalence des périodes d'études universitaires (1956); no. 32 Convention européenne sur la reconnaissance académique des qualifications universitaires (1959); No. 64 Accord européenne sur le maintien du paiement des bourses aux étudiants poursuivant leurs études à l'étranger (1969); and no. 138 Convention européenne sur l'équivalence générale des périodes d'études universitaires (1990).

Switzerland will also ratify the UNESCO convention on the Recognition of Studies, Diplomas and the Degrees concerning Higher Education in the States belonging to the Europe Region (1979).

b) Switzerland will participate in European Community programs for mobility and cooperation in higher education. This is done through ERASMUS: see the Agreement between the European Economic Community and the Swiss Confederation establishing cooperation in the field of education and training within the framework of the ERASMUS Program, initialled at Brussels, 14 February 1991 (subject to the usual procedures of signing and ratification).

Higher Education in Federal Systems: Germany

Ulrich Teichler

INTRODUCTION

Any attempt at a comparative description of the higher education system of a country that has a federal governmental system will encounter serious difficulties, in particular the following problems.

First, there are very great differences between federal systems. It is difficult to find anything that federal systems have in common as compared with nation-state systems, if we disregard the obvious characteristic that federal systems have an additional level of government. For instance, at one extreme we see that the federal government of the Federal Republic of Austria, in the Austrian system of higher education, plays an administrative and supervisory role that is in no way different from the role of national governments in nation-state systems. There are federal systems where the federal government supervises some sectors of higher education but plays a secondary role in the coordination of the higher education system overall: this is definitely true for Switzerland; while in Brazil the role of the federal government in the country's higher education system overall has gained importance in the last two decades. In other federal systems the federal level has merely coordinating functions. These may be very limited, but on the other hand may also be very extensive, as is the case in the Federal Republic of Germany. In still other federal systems the federal government has neither a supervisory nor a coordinating role. In these cases, too, there are considerable differences: for instance, a decade ago at another seminar on the management of higher education in federal systems, the role of the federal government in the United States was described as a "foundation role," and that of the Canadian federal government on the other hand as a "faceless purse."[1] Finally, the question of financing introduces another characteristic for which great differences can be observed: at one

extreme more than 90 percent of the higher education systems are financed by the federal government, at the other extreme, less than 20 percent.

Second, we find a great deal of terminological confusion in analyses of higher education in federal systems. In some cases, for instance, the "federal role" refers solely to government, while in other cases the term also includes the social forces relevant to higher education which operate at the federal level, such as the bodies of rectors, of academic staff, or of employers and professions at the federal level. Another example of such confusion is the fact that "federal" coordination may mean different things: (a) coordination by the federal government; (b) joint coordination by federal and state agencies; or (c) interstate coordination, i.e., coordination on federal level without major involvement of the federal government. I find it more appropriate to talk of "nation-wide" rather than "federal" coordination, since the first term does not lead automatically to the conclusion that coordination on the national level always is the task of federal governmental agencies. Clarifying this terminology is particularly important for any analysis of the higher education system in the Federal Republic of Germany because although many mechanisms exist there for the nation-wide coordination of higher education, only a few of those are solely in the hands of the federal government.[2]

Third, it appears impossible to find a pivotal point similar to the point referred to by Archimedes in his statement *Give me a place to stand on and I will move the earth* — for evaluating to what extent higher education functions well or poorly in federal systems. In each federal system it is assumed in principle that a certain degree of plurality in the higher education system is desirable; uniformity is less desired, as for instance in the French higher education system. Actually, however, in some countries with a federal system we observe that national homogeneity is held in high esteem, while in others very great plurality between the states is esteemed. Moreover, with regard to the patterns of higher education systems, some federal systems consider diversity of higher education institutions appropriate, i.e., intrastate diversity of higher education institutions, while others, by contrast, emphasize plurality among their states or provinces but not intraprovince diversity.

The following analysis focuses on the specific nature of the higher education system in the Federal Republic of Germany which in comparison to higher education in other federal systems is particularly unusual. On the national level, Germany has a variety of instruments of federal, federal-*Land* and inter-*Länder* coordinating bodies and mechanisms which together have a strong overall planning and coordinating function, but which at the same time are destined to give scope for differences between the *Länder*.

This analysis is based on the situation in the Federal Republic of Germany in the summer of 1990.[3] In October 1990, the German Democratic Republic ceased to exist. The process of unification has formally unfolded in a way that

afforded interesting insights into the distribution of legal and actual powers in a federal system. Therefore, in the conclusion of this chapter, the process of transition in the higher education system in the territory of the former German Democratic Republic will be briefly discussed.

THE RATIONALES OF COORDINATION AT THE NATIONAL LEVEL

The constitution of the Federal Republic of Germany makes provision for a federal system. The *Länder* (the functional equivalent of provinces in Canada or of states in the United States) were granted autonomy in state affairs which was partly a reaction to the misuse of central authority during the Nazi regime.

However, the *Basic Law* limited decentralized structures in two ways: first, in Article 72,3 it set a constitutional norm to preserve "uniform living conditions" in all parts of the country. Second, it classified areas of state affairs which ought not be handled solely by the *Länder*, but jointly by the *Länder* and the federal government or, finally, solely by the federal authorities.

Thus, the federal coordination of higher education was not strictly defined but was left open to debate. The constitutional regulations on the functions of *Länder* and federal authorities stressed cultural affairs — including the supervision of all educational institutions — as the major task of the individual *Länder*, thus encouraging regional diversity and even competition in the cultural domain. It is interesting to note, however, that the established federal powers affected higher education more directly than other areas of the education system. This was due to the legislative authority of the federal government to promote scientific research, and to legislative responsibility for formulating the regulations of the civil service and health services.

Additionally, the constitutional requirement to preserve uniform living conditions presented the opportunity to revise regulations of federal responsibilities where necessary. Later in this chapter the constitutional amendments which increased federal powers in higher education will also be discussed.

The "fundamental dilemma," as Peisert and Framhein[4] call it, of federalism in higher education in the Federal Republic of Germany was not just superimposed by the *Basic Law*, for it met the traditions of higher education as well as public expectations. Cultural diversity was accepted generally, but at the same time one of the federal government's most recent and unsuccessful calls to increase federal powers in 1978 could claim that students, parents, and teachers expect a "minimum of necessary uniformity of education" as a precondition to mobility and equal opportunity in education and employment, as well as to the relationships between education and employment. Institutions of higher education traditionally have been under the supervision of individual *Länder*, but at the same time a certain degree of homogeneity and standardization in higher education, as well as the opportunity for professors and students to transfer

easily from one university to another, was considered desirable and was taken as a matter of course.

A second rationale of coordination is firmly rooted in the Federal Republic of Germany, though it is not that strongly emphasized in debates on coordination in higher education. In Germany, important issues are expected to be solved in a process of balanced negotiation between all forces legitimately involved. This holds true to many areas and to many compositions of key actors: federal-state coordination of higher education, coordination of vocational education between governments, employers and unions, or coordination within higher education institutions between professors, junior academic staff, students and other staff. The processes of coordination and their outcomes might be criticized, but yet they are preferred to the strong power of any single governmental level or to be left without any significant coordination. Whatever the popular critique of the current state of coordination may be, the best possible decision is expected to be the result of balanced negotiation between governments of the respective *Länder* in the interstate or federal-state framework, including processes of involving representatives of the higher education system in deliberations before government makes a final decision.

THE POSTWAR DEVELOPMENT OF DECENTRALIZATION AND CENTRALIZATION IN MANAGING HIGHER EDUCATION

A postwar history of higher education in the Federal Republic of Germany published in 1978 has perceived three periods of development in cultural federalism in higher education in the Federal Republic of Germany.[5] In the mean time, we might add a fourth or even a fifth stage.

Decentralized Reconstruction, 1945-1956

During the early postwar period, federal responsibilities were limited to legislative measures and some financial support for scientific research and cultural relations with foreign nations. In 1948 the *Länder* decided to create the Permanent Conference of the Ministers of Culture — later the Permanent Conference of the Ministers of Education and Cultural Affairs (*Staendige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland — KMK*); this was originally conceived of as a forum for communication but, since about 1955, became responsible for setting guidelines for minimum conformity in the education system.[6] Its recommendations and preparations of inter-*Länder* contracts were based on unanimous agreements between all the 11 *Länder*. The *Länder* are not legally bound to implement the recommendations, unless they were ratified by the *Länder* parliaments or by ministerial orders of the respective *Land*. Thus the coordinating power was very weak.

In this period, some organizations were created at the federal level, for example, the West German Rectors' Conference (*Westdeutsche Rektorenkonferenz*), the German Academic Exchange Service (*Deutscher Akademischer Austauschdienst*) and the German Research Association (*Deutsche Forschungsgemeinschaft*) — the latter a body self-governed by the community of German researchers, funded half each by the federal government and by the governments of all *Länder*, in charge of providing grants upon application for individual research projects and other scientific activities.[7]

System-wide Initiatives, 1957-1969

In 1956, the federal government began to take part in financing research bodies (German Research Association, the Max Planck Society — in charge of research institutes conducting basic research, and subsequently the Frauhofer Society — in charge of institutes conducting applied research)[8] and the expansion of universities. A major step towards the nation-wide coordination of higher education planning was the establishment of the Science Council (*Wissenschaftrat*) in 1957.

This was the first central agency for education in which the federal government and the *Länder* worked together; the Science Council includes representatives of higher education and research institutions as well as representatives of the public. Actually, 11 votes in the Administrative Commission of the Science Council are held by the six representatives of the federal government and altogether 11 by the representatives of each *Land*. The Science Commission is comprised of 16 scholars, jointly proposed by the West German Rectors' Conference, the German Research Association and the Max Planck Society, and six representatives of the public, jointly proposed by the federal and *Länder* governments, and all appointed by the president of the Federal Republic. Both commissions might take initiatives and vote provisionally, where a two-thirds majority is required. Final recommendations are made by the general assembly of both commissions, again requiring a two-thirds majority.

The Science Council was founded for the purpose of making recommendations for the promotion of research, but soon directed its attention towards the quantitative, structural and organizational development of the system of higher education.[9] During this period federal expenditures on higher education increased substantially, especially on buildings and facilities, promotion of research, and financial assistance for students. The recommendations were not binding for the governments, but had great impact on quantitative planning and construction, as will be discussed below.

In 1965, federal and *Länder* governments agreed on a financial aid program for students. Costs for need-based scholarships for students — the formulas regarding grants and loans changed several times over the years — are jointly

borne by the federal government (65 percent) and the *Länder* governments (35 percent).

Cooperative Federalism, Since 1969

During the late 1960s, the period of a generally decentralized policy of higher education came to an end, as Peisert and Framhein note.[10] In 1969, an amendment to the *Basic Law* regarding the common tasks (*Gemeinschaftsaufgaben*) of federal and *Länder* agencies made provision for common responsibility for facilities and construction in higher education; educational planning and research planning also fell under this mantle. On this basis the *Higher Education Construction Act* was passed which envisaged a 50 percent federal share in funding the construction of university buildings. Also, a (federal-state) Planning Committee for Construction in Higher Education (*Planungsausschuss fuer den Hochschulbau — PLA*) was created in 1969.

In the PLA the federal government, represented by the Federal Minister of Education and Science and the Federal Minister of Finance, has a total of 11 votes; and the 11 *Länder*, each represented by one official from the respective ministries responsible for higher education, have one vote each. Decisions require a 75 percent majority and are binding for the budgetary planning of the governments, but can be overruled by the respective parliament. It should be noted, though, that the Science Council actually is the major body in charge of construction planning. Detailed, four-volume plans recommended each year by the Science Council are more or less automatically passed by the PLA.

These changes were made before the coalition federal government of the Social Democratic Party and Free Democratic Party came into office in the autumn of 1969. (From 1949 to 1966 the Christian Democratic Union had ruled alone or together with the Free Democratic Party or other smaller parties, and from 1966 to 1969 a so-called "Great Coalition" of Christian Democratic Union and Social Democratic Party was in office. (During most of this time in about half the *Länder* the Christian Democratic Union and the Social Democratic Party, respectively, were the strongest parties.) The new federal government in 1969 increased the duties of the former Federal Ministry of Scientific Research, now renamed the Federal Ministry of Education and Science (*Bundesministerium fuer Bildung und Wissenschaft — BMBW*). In 1970, the federal government and the *Länder* governments signed an agreement to found the joint planning agency which, in 1975, was renamed the Federal-*Länder* Commission for Educational Planning and Research Promotion (*Bund-Länder-Kommission fuer Bildungsplanung und Forschungsfoerderung — BLK*). The BLK was expected to submit proposals on long-term planning in education. It also created a program to promote innovation in educational institutions: according to this so-called "*Modellversuchsprogramm*" the federal government and the

respective *Länder* each finance 50 percent of the innovation programs for institutions of education.[11] The BLK is comprised of seven representatives of the federal government (various ministries) holding 11 votes as well as one representative each of the educational ministries of the *Länder*. Recommendations require consent by the federal government and three quarters of the *Länder* representatives. Binding decisions require subsequent approval by at least nine heads of the *Länder* governments. Only those governments that agree to the recommendations are bound by them, and on the proviso that their respective parliaments accept the budgetary consequences.

In 1976, the *Framework Act for Higher Education* (*Hochschulrahmengesetz — HRG*)[12] was enacted which provides for some common elements in the organization of higher education. The Framework Act required a majority vote both by the *Bundestag*, the federal parliament elected by the people, and the *Bundesrat*, the second chamber comprised of representatives of the *Länder* governments. The Framework Act determines which matters have to be regulated uniformly by the higher education laws of the *Länder* and in which aspects the *Länder* can make their own specific regulations. The ranks and functions of academic staff, for instance, as well as the types of degrees, are laid down by the Framework Act. This Act also determines the general requirements for admission to higher education institutions, while the laws of the individual *Länder* specify different requirements for admission to higher education institutions of persons who do not have the *Abitur*, i.e., the secondary school leaving examination certificate. The Framework Act describes the tasks of the two major types of higher education institutions, but individual *Länder* may regulate specifically the tasks of the *Fachhochschulen* (A special type of higher education institution offering highly practice-related study courses of a scientific nature, particularly in the fields of engineering, economics, social work, agriculture and design. This includes application-related research and development.)[13] compared to those of the universities and also to establish special types of higher education institutions (for instance, comprehensive higher education institutions[14] which combine the functions of universities and *Fachhochschulen*). The Framework Act stipulates that in all decisions on research matters, professors must have a minimum of 51 percent of the votes in the responsible bodies, but the higher education laws of specific *Länder* provide for a wide scope in structuring the major bodies of higher education institutions. Finally, higher education institutions may be headed by a rector who is responsible for academic self-administration but has limited control over staff and financial matters, or by a president who is the chief officer for both these areas of university administration.

On the basis of the *Framework Act for Higher Education* the *Länder* signed an agreement in 1977 to establish Study Reform Commissions (*Studienreformkommission*) at the federal level, which had elaborate guidelines

for common elements of curricula in institutions of higher education in the Federal Republic of Germany.[15] A permanent commission was established for recommending general guidelines regarding study reform and for coordinating the activities of the commissions of the single fields of study. Eleven representatives of the *Länder* governments as well as 11 representatives of higher education institutions (7 professors, 2 assistants and 2 students) were members of the commission deciding by majority vote. In addition, two representatives of the federal government and one representative each of employers and trade unions were members without voting rights. The commissions for individual fields of study were composed each of four professors, one assistant, two students, three *Länder* governmental representatives, as well as three representatives of the "*Berufspraxis*" (employees, professions, unions). The recommendations were passed to institutions of higher education and other agencies for comments, were subsequently revised and eventually adopted by the Permanent Conference of the Ministers of Education and Cultural Affairs. As will be discussed below, the scheme was somewhat modified in 1985.

Post-1977: Increasing Inter-Länder Coordination

A fourth period following the three suggested by Peisert and Framhein emerged soon after the *Framework Act for Higher Education* was passed in 1976. A gradual erosion of the role of the federal government as well as Federal-*Länder* agencies[16] had already started in 1972, when no substantial consensus could be reached about the first General Plan for Education (*Bildungsgesamtplan*)[17] and the enactment of the Framework Act was postponed. The eventual enactment of the *Framework Act for Higher Education* in 1976 and the subsequent creation of Study Reform Commissions might create the misleading view that there was a continuous trend towards more nation-wide coordination. It is certainly true to say that the federal government and parliament's role in coordinating higher education was reduced. This was demonstrated most visibly in 1977, when the *Länder* forced the federal government to accept only an advisory role in the Study Reform Commissions.

The federal government published a report in 1978 on the "structural problems of the education system in the federal state" that pointed at many heterogenous elements of the education system which threaten the desired norm of a minimum of uniform living conditions. More federal powers were demanded.[18] The *Länder* governments, however, began to refuse any further Federal-*Länder* regulations and agreements in educational planning. For example, they turned from federal-state to interstate agreements regarding access to higher education, and, as already mentioned, they refused to establish the Study Reform Commission on the basis of a federal-state contract or in the context of supervisory functions of the *BLK*. Rather, the Permanent Conference of the

Ministers of Education and Cultural Affairs claimed for itself responsibility for coordinating the Study Reform Commissions. In response, the federal government drastically reduced its expenditures for the expansion of facilities and construction in higher education around 1980. Some *Länder* governments interpreted this as an indication of the federal government's desire to relinquish its involvement in higher education planning.

In the course of the 1980s hardly any changes were made in the mechanisms of nation-wide coordination of higher education. Merely, by amending the *Framework Act for Higher Education*, the Study Reform Commissions were merged with the previously separate Committees for Framework Examination Regulations. This merger of study reform and coordination of examination regulations increased the importance of scholars compared to government representatives when drawing up recommendations, but did not alter the relationship between federal and *Länder* governments.

Overall, the importance of the mechanisms of nation-wide coordination of higher education or of the educational system in general decreased in the 1980s. It became very obvious in the early 1980s that these mechanisms had been put in place specifically to cope with growth. In the 1980s, however, public expenditures for higher education rose only slightly more than the rate of inflation, although the number of students increased from 1 million to 1.5 million. However, since the latter development did not revive the nation-wide coordination mechanisms, we can now see that the primary function of these coordination mechanisms had not been coping with student growth but coping with resource growth and its impacts.

The 1980s also saw a changing role for the federal government in higher education policy. Policy initiatives compensated for the loss of influence in quantitative and structural planning. In 1982 again a coalition of the Christian Democratic Union and the Free Democratic Party came to power at the federal level. Dorothee Wilms, the new Minister for Education and Science, achieved political success with the slogan: "Differentiation and Competition."[19] The amendment of the *Framework Act for Higher Education* in 1985, originally based on an initiative by the federal government, was destined to distinctly restrict governmental supervision of higher education institutions. The *Länder*, regardless of which parties were in power there, resisted major restrictions of public supervision of the administration of higher education institutions, and of the approval of examination regulations in the various departments of the institutions. The sole major change in this respect was that under the amendment to the Act the ministries of the *Länder* no longer examined the content of study regulations of the various departments, but merely the general legal parameters.[20]

Similarly, Minister Wilms' successor, Federal Minister Jürgen Möllemann, succeeded in making into a major concern of higher education policy the very

long average duration of studies, more than six years for the first degree which, when compared on an international basis, is regarded as equivalent to a Master's degree. This contributes to the high average age of graduation (more than 28 years). Moreover, the federal ministry also took the initiative in the late 1980s to address increasing complaints about deteriorating study conditions: minor measures were initiated to increase construction expenditures and the number of academic staff positions. Also, some of the need-based scholarships were again awarded as grants — in the mid-1980s the scholarships had been awarded only as loans.

Late 1980s: Reemergence of Forceful System-wide Planning

In the late 1980s the conviction grew that the very complexity of the coordination mechanisms had, in times of low expansion and political controversies, resulted in few far-reaching innovations in the German system of higher education.[21] However, the efforts to achieve systematic changes by means of nation-wide coordination were not abandoned. The strong pressure which since 1990 has been exerted on the new *Länder* of the former German Democratic Republic to adapt quickly and completely to Western traditions obviously reflects a revival of strong system-wide planning.

THE TARGETS OF NATION-WIDE COORDINATION

The preceding section described the causes and mechanisms of the historical development of nation-wide coordination. This section examines the other side of the matrix, namely the elements of the higher education system with which the nation-wide governmental activities were concerned; as well as the role which federal, Federal-*Länder*, inter-*Länder* bodies and regulations play in the respective elements of the higher education systems. Seven such elements have to be named in this context.

International Cultural Relations

Cultural regulations with foreign nations were considered to be the task of the federal government in the *Basic Law* and have remained more or less undisputed as such. For example, funds for travel abroad by academic staff, study abroad, lecturing and research by foreign academics in Germany, aid for higher education institutions in third world countries, etc. are almost exclusively made available by the federal government.

Promotion of Scientific Research

According to the *Basic Law*, the promotion of scientific research was initially a federal duty in terms of legislation, but not necessarily in terms of funding. Schemes were introduced in the 1950s and 1960s to make the federal government responsible for the funding and coordination of "big science" and some special research programs. There were other schemes for mixed funding for major public research agencies and organizations until, in the late 1960s, higher education planning legally became a joint Federal-*Länder* task. It was also generally accepted that the federal government would be involved in planning the promotion of research for institutions of higher education.

It should be noted, however, that the university budget is supposed to provide basic resources for research. Salaries and teaching assignments for professors are based on the assumption that half of the working time minus respective administrative tasks is to be devoted to research. Some professionals are recruited partly or completely for research purposes, and even the support provided by secretaries, technical and administrative staff is, in principle, fashioned so that it can assist research. Finally, higher education institution budgets fund equipment, material, student support staff, etc., also for research purposes. It is therefore estimated that one third of the regular budgets of higher education institutions profit research. According to this calculation, the *Länder* spend at least twice as much as the federal government on university research. On the other hand, the federal government spends at least eight times more on nonuniversity research than it does on university research.

Financial Aid for Students

As much as 65 percent of need-based scholarships for students heading for their first degree (the term "undergraduate" might be misleading because German higher education institutions do not award any degrees that are the equivalent of a Bachelor's) is borne by the federal government and the remainder by the *Länder* governments.[22] The Federal Ministry of Education and Science takes the initiative for the legislation and the supervision of such programs which have to be agreed by the *Länder*. The purpose of federal involvement is to prevent regional disparities in public efforts to secure equal opportunity. The federal government also finances completely the *Studienstiftung des deutschen Volkes* — a public institution that provides scholarship for outstanding students.

Quantitative and Structural Planning

Planning was originally the domain of each *Land*. Since the establishment of the Science Council in 1957, however, the federal government has been

involved in recommendations. The Science Council sets goals regarding the overall capacity of higher education, the quantitative development of certain fields of study, and the regional distribution of higher education. As noted above, the federal government became directly involved after 1969 in decision-making on quantitative and structural development: in particular, long-term quantitative and financial planning by the *BLK* and decisions regarding construction cannot be made without federal consent.

Construction

Construction of new university buildings and major new facilities (laboratories, libraries, etc.) of all German universities are financed by the federal government and the respective *Land* at the rate of 50 percent each. No single university building will be constructed unless it is recommended by the Science Council and receives a positive decision by the Planning Committee for Construction in Higher Education. As a result, construction planning has become the most important mechanism of the above-discussed nation-wide quantitative and structural higher education planning.

Access and Admissions

Access and admissions are largely regulated on a nation-wide basis, with the federal government participating in some aspects. The general requirements for admission to the various institutions of higher education are governed by the *Framework Act for Higher Education* and are elaborated jointly by the federal government and federal parliament and by the *Länder* governments. The Permanent Conference of the Ministers of Culture issues detailed regulations on the curricula in upper secondary education and thereby on the requirements for graduating with an *Abitur*. The framework of regulations on admission to studies for which a *numerus clausus* exists is formulated by the *Framework Act for Higher Education*, the Constitutional Court, additional Federal-*Länder* or inter-*Länder* treaties, or by the Permanent Conference of Ministers of Education and Cultural Affairs. Where restricted admissions are concerned, it is the Central Admissions Agency (*Zentralstelle für die Vergabe von Studienplätzen*) that handles the admission procedure. In cases of open admissions the individual university accepts every qualified person. In cases of restricted admission to an individual field of study in a given university, the university follows a general formula. Thus, admissions are almost totally decided on a system-wide level, and rules for access and admissions are uniform for all institutions.

Curricula and Examinations

Curricula have always been the domain of the individual institutions with the exception of those courses leading to the state examination (especially teacher training, law and medicine) which are the domain of the ministries responsible for those respective professions.[23] As the federal government, or the federal legislative bodies, set the standards for civil service and health service regulations, it is involved in questions concerning curricula in some fields of study. Correspondingly, the Permanent Conference of the Ministers of Education and Cultural Affairs set national frameworks for state examinations for teacher training.

Since the late 1960s, state governments have begun to exercise their right of final approval of study examination regulations of the individual departments more actively: a right that has subsequently in fact become an instrument of considerable control. At the same time, system-wide coordination has become more powerful. In those fields of study leading to a university diploma it is the commission set up by the *KMK*, the *WRK*, and the representatives of scholars in each field (*Fakultätentage*), which suggest the general examination regulations that are finally approved by *KMK*.[24]

The federal government supported mechanisms to reform curricula. The *BLK* established a program of model experiments for innovation in education, half being paid by the federal government and the other half by the government of the respective state. In the late 1970s, the establishment of nation-wide Study Reform Commissions expressed the growing interest of governments in promoting innovations to the higher education system. Although, at the same time, it can be considered as an instrument of system-wide coordination of curricula. The *Länder* governments coordinated the Study Reform Commissions while the federal government was granted the role of observer.[25] Subsequent to the revision of the *Framework Act for Higher Education* in the mid-1980s, the nation-wide mechanism of coordination of examination regulations and that of study reform were merged.

Personnel

General regulations concerning university personnel are made nation wide, either by means of federal laws concerning the civil service or with the help of the *Framework Act for Higher Education*. In both cases the legislative initiative has to be taken by the federal fovernment and the *Bundestag*, the federal parliament, but it has to be approved by the *Bundesrat*, the chamber of the *Länder*. The federal initiative for the Framework Act intended to promote homogeneity of the academic positions, although considerable diversity remained regarding intermediate and lower academic ranks. Wage scales in

higher education are identical for all German *Länder* — except for wage increases for full professors who were offered a position from another university or any other employer. The individual *Land*, however, might prefer a specific quantitative ratio of positions.

Administration and Self-administration

The Framework Act passed in 1976 was not confined solely to forming the regulations for personnel, but also included general regulations, although individual states remained responsible for specifying most rules regarding the administration and self-administration of the university.[26] Coordination was considered necessary primarily because of the very different state laws and orders regarding the participation of junior staff, administrative staff, and students within the university self-administration system, because prior to the *Framework Act for Higher Education* the professors' votes ranged from 30 to 70 percent on university committees. However, these major areas of coordination were the result not of political negotiations at the federal level, but of a ruling by the Federal Constitutional Court.

SELECTED ISSUES OF GERMAN HIGHER EDUCATION IN COMPARATIVE PERSPECTIVE

Financing of Higher Education

The main responsibility for financing higher education lies with the respective *Länder*. The federal government pays only for the following:

- half the costs of higher education construction and major equipment purchases;
- more than half the costs of student aid;
- half the costs of model experiments on higher education reform;
- 60 percent of the budget of the German Research Association which awards about 40 percent of the grants given to scholars at higher education institutions;
- direct research grants at higher education institutions comprising about 20 percent of all grants awarded to university researchers; and
- most of the costs arising from the international exchange of academic staff and students.

Experts estimate that in 1986 the federal government paid for 17 percent of all public expenditures for higher education. In 1975 — at a time of more extensive

construction activities — that percentage had been 23 percent, in 1980, 18 percent.[27] Data on federal and *Länder* financing of higher education have been compiled in Tables 1 and 2. In this context it must be remembered that the German institutions of higher education do not charge tuition fees, but that students pay fees only for the student union and for health insurance. Around 1990, federal higher education spending presumably was slightly above DM 4 billion, *Länder* spending approximately DM 27 billion.

Most federal expenditures for higher education — the first three of the above-named categories — are part of the "joint tasks" stipulated by the constitution. No special federal "power of the purse" has existed in the sense that there are hardly any situations where the federal government can undertake any initiatives without involving the *Länder*. However, in particular, the intention to expand the higher education system in the course of the 1960s resulted in the expansion of joint financing programs that allowed the federal government to play a not insignificant role in higher education planning and at the same time increased the need for harmonization among the *Länder*.

Cost sharing for construction in higher education, established since 1969, has become a very effective tool of nation-wide quantitative and structural higher education planning. As has already been mentioned, practically no higher education construction takes place without involvement of the Science Council and the Planning Committee for Construction in Higher Education in the decisionmaking process. If, for instance, the Science Council finds that there is an excessive overall capacity for the study of agricultural sciences in the Federal Republic of Germany, no expansion in this field of study will take place at any German university. On the other hand, the recommendation made by the Science Council to reduce the number of agricultural departments in Germany was not implemented.

Cost sharing as such does not necessarily result in narrowing the differences between the *Länder* with regard to enrolment capacities at higher education institutions or to research resources. It is after all entirely conceivable that the relatively richer *Länder* could more easily use the mechanism of joint financing and that this would further increase the differences among the *Länder*. As a matter of fact, since the mid-1960s, the differences with regard to the relative enrolment capacities at higher education institutions have very considerably decreased. This is due to the fact that from the mid-1960s until the late 1970s, higher education policy was generally guided by the belief that "supplying" all regions with higher education institutions was a desirable goal. For instance, the Science Council and those *Länder* with relatively small enrolment capacities agreed that in allotting funds for construction, priority should be given to new higher education institutions in the "undersupplied" regions.

Table 1: Public Higher Education Expenditures in the Federal Republic of Germany

	Federal	*Länder*	*Federal*	*Länder*	*Communities*
	millions of Deutschmarks		*percentage*		
a. Higher Education					
1970	985	5,873	14.3	85.5	0.2
1975	1,339	12,247	9.9	90.1	–
1980	868	16,882	4.9	95.1	–
1985	1,071	20,345	5.0	95.0	–
1989	1,205	24,577	4.7	95.3	–
b. Assistance Schemes					
1970	257	753	25.4	74.6	–
1975	1,956	2,009	44.2	45.3	10.5
1980	2,548	2,857	41.2	46.2	12.6
1985	1,626	2,478	30.7	46.7	22.6
1989	1,715	2,061	35.9	43.1	21.0
c. Joint Research Promotion					
1970	909	419	68.5	31.5	–
1975	1,853	713	72.2	27.8	–
1980	2,591	975	72.6	27.3	–
1985	3,262	1,259	72.2	27.8	–
1989	3,827	1,448	72.5	27.5	–
d. Total Public Research Expenditures					
1979	9,710	5,399	64.3	35.7*	
1985	12,767	7,706	62.4	37.6*	
1988	13,900	9,100	60.4	39.6*	

Source: Bundersminister für Bildung und Wissenshaft *Grund- und Strukturdaten 1990/91* (Bonn: 1990) pp. 262-68.

Notes: 1989 data are estimates. Assistance programs also include other areas of education; some 40 percent are for student aid. Total public research expenditures include one third of public expenditures for higher education. *Total public research expenditures in the category "*Länder*" include expenditures by communities.

Table 2: Sources of Research Grants awarded to Institutions of Higher Education in the Federal Republic of Germany

	1970	*1975*	*1980*	*1985*
Research grants (millions of Deutschmarks)	651	1,155	1,709	2,309
Percentage of grants among estimated research budget of higher education institutions	18.6	25.1	29.2	34.5
Sources of Research Grants (percent)				
Private sector	11.9	5.5	11.3	21.7
Federal government	14.0	23.7	20.8	20.0
Länder governments	6.1	2.5	4.0	4.7
German Research Association (joint Federal-*Länder* funding)	47.0	51.7	48.3	40.0
Support schemes for junior academic staff (Fed-*Länder*)	1.4	6.2	2.0	1.9
Foundations (nongovernmental)	17.5	8.5	9.8	8.8
International organizations	0.5	0.6	0.7	2.9
Total	100.0	100.0	100.0	100.0

Source: Wolfgang Adamcak, "Forschungsfinanzierung in der Bundesrepublik Deutschland," in Gabriele Gorzka et al. (eds.), *Wozu noch Bildung?* (Kassel: Wissenschaftliches Zentrum für Berufs- und Hochschulforschung, 1990), p. 225.

No analysis of higher education financing can regard federal funds merely as possible transfer payments between the *Länder*, for, firstly, the *Länder* governments directly bear half of their respective costs for higher education construction and model experiments and, secondly, in the joint support of scholarships and in joint research promotion, the *Länder* each pay a certain share of the total costs — regardless of how much the individual *Land* will eventually spend.

There are also tax transfers between the *Länder*. First, there is a certain "financial equalization" between the *Länder*, poorer states receiving a certain share of the tax revenue of the more prosperous areas. Of course, higher education expenditures of poorer *Länder* also profit therefrom.

Second, West Berlin received considerable financial support from the federal government and the governments of the other *Länder*. Precisely because of the special political situation of Berlin there was agreement that it should play a leading role in science and culture. As a result of unification in 1990, West Berlin and East Berlin now have about 2.5 times the enrolment capacities and approximately 2.5 times the nonuniversity research potential that would correspond to the population of the now united city and its immediate environs. Politicians agree that by 1992 at the latest the federal government and the *Länder* must decide jointly whether Berlin should continue to receive such treatment and as a result a new mechanism for cost sharing would have to be established, or whether higher education and research facilities in Berlin should be drastically reduced.

And third: in one instance the *Länder* decided to provide special financial equalization for one single university. When in the early 1970s the smallest *Land*, i.e., Bremen, established a university, the other *Länder* shared in the funding of this university for about ten years. This was due not only to the fact that the new university would provide facilities also to the surrounding areas outside the *Land* boundaries (a situation that would apply equally to the *Land* of Hamburg), but also because the *Land* of Bremen is too small to finance the initial phase of even a minimum-size university.

Overall we can say that during the 1960s and 1970s, the federal structure of the Federal Republic of Germany, which is committed to both decentralization and a "uniformity of living conditions," resulted in greatly altering the situation in higher education by establishing new higher education institutions and expanding existing ones. Consequently, higher education resources in Germany currently are distributed more evenly across the entire country than in any other major European area; even among the smaller European countries only Belgium and the Netherlands have similar set-ups.

Planning and Funding of Research

It is generally said of the 1960s and 1970s that higher education planning was concerned primarily with teaching and study rather than with research. Calculations for the size of new higher education institutions, for the required number of staff and facilities always related to the number of students, although figures were weighted in a range of 1 to 7 by fields of study. Although "formula funding" in the strict sense of the term never existed, basic estimates relating to required resources referred primarily to the numbers of students.

During this period, however, higher education planning was at the same time research planning, because it is generally assumed that at least one-third of the working time of professors should be dedicated to research and that higher education institution budgets should be sufficient to enable professors to engage in at least a certain amount of research. When being recruited, professors also negotiate the academic, secretarial, and possibly technical staff and material funds provided for their professorships or institutes with regard to both teaching and research needs. The university-level and departmental-level bodies decide on the allotment of research funds. Professors who receive insufficient means can even complain to the responsible ministry and can demand better funding if they can convince them that the low funding provided by the university prevents them from fulfilling their "official duty" of research.

Where professors compete for public funds, including funds of the German Research Association, it is considered completely normal for higher education institutional resources to be included as a complement to research projects. It does not occur to anybody, as this appears to be the case in Canada, that it would be an unfair burden on higher education institutions to have to use considerable amounts of their own funds for research projects that are assisted by external grants,[28] the general view being that research would be carried out with insufficient resources and in principle even more internal university funds would have to be allotted for research if no external funds were available. As already mentioned, research expenditure data in Germany estimate that approximately one-third of the regular budget of higher education institutions is actually spent on research. If we accept this, about 70 percent of university research is financed by the university budget, only approximately 30 percent by external grants. In 1985, 40 percent of the external grants came from the German Research Association financed jointly by the federal and the *Länder* governments. Scientists and government representatives of the federal and *Länder* levels jointly discuss and decide on priority subjects and on the distribution of funds by discipline, while scientists as a rule decide only on the assistance to individual projects within these general conditions. The various *Länder* governments and higher education institutions do their best not to be shortchanged when these funds are distributed; anybody who receives less than

an average share of funds will make a great effort — also by providing complementary resources — to come closer to the average.

In addition there no doubt exists the power of the purse of the federal government to promote university research by special emphasis. As Table 2 shows, in 1985 other federal funds, partly from the Federal Ministry of Science and Technology, partly from various other ministries, did not amount to more than 20 percent of external funding to higher education institutions, which in absolute figures is less than DM 0.5 billion (almost as much as higher education institutions receive from the federal government via the German Research Association). On the other hand, in 1985 the federal government spent about DM 10 billion on research in public research institutions, in research institutes of the Max Planck Society, the Fraunhofer Society, or of industry.

Until the 1970s research support from most *Länder* consisted almost exclusively of the basic financing of higher education institutions and some *Länder* institutes. In the 1980s, however, the *Land* of Baden-Württemberg started assisting research at higher education institutions by providing incentives and fostering competition and to stimulate a greater interest in research in new technologies and in similar areas. Several *Länder* followed this example so that by now this extra *Länder* assistance to research, which in 1985 accounted for only 4.7 percent of external grants (see Table 2), has presumably grown considerably.

Currently there is much speculation in the Federal Republic of Germany whether the traditional uniformity of German higher education institutions still exists or whether increasing differences in quality are developing.[29] However, the statement that the promotion of research in Germany has resulted in great differences in quality among the higher education systems of different *Länder* belongs into the realm of party polemics rather than that of valid perception.

Student Mobility and Recognition of Studies

The major statistical surveys being published in Germany on higher education do not contain any data on the percentage of students who study in a *Länder* other than the one in which they live.[30] No doubt the statistical data available at the Federal Office of Statistics (*Statistisches Bundesamt*) would answer the question, frequently asked in the United States and in Canada, of how many students come from another state, another province, or another *Land*. Such information, however, would be valid only for first-year students, for students can easily move their main residence to the city where the university is located. According to various sets of available data it would seem correct to estimate that almost 20 percent of all students attend university in a *Land* other than the one where they lived immediately before starting their studies. This information, however, is not relevant for Germany. German students do not pay tuition

fees. In principle they are entitled to study at any German institution of higher education. The majority of first-year students prefer to attend a higher education institution within a circumference of approximately 100 km.[31] If the institution lies close to the border between *Länder*, usually an above-average share of students comes from other *Länder*. Approximately 25-30 percent of university students and approximately half as many students at *Fachhochschulen* avail themselves of the opportunity to change institutions in the course of their studies.[32]

The principle of unlimited student mobility between the *Länder* has not resulted in individual areas leaving it to the others to pay for higher education enrolment capacities. The Federal Constitutional Court decided in 1972, and in even greater detail in 1976, that the constitutional right of free choice of occupation/profession would be guaranteed only if the total higher education enrolment capacities in the Federal Republic largely corresponded to the total number of qualified graduates of secondary education institutions wishing to attend university. This requirement by the Federal Constitutional Court for ensuring adequate enrolment capacities applies to all *Länder*. In the early 1970s the Federal Constitutional Court forced the *Land* of Bavaria to cease giving preference to students from Bavaria when deciding on admission to *numerus clausus* study programs.

In this connection there has been a recent survey on regional student mobility, published as part of an analysis of the employment situation of students two years after graduation. In this review, "region" means the geographic area rather than a division by *Länder*. Of the graduates surveyed, 39 percent were completely immobile, i.e., they attended a higher education institution and subsequently were employed in the *Land* where they had lived before starting their studies; 17 percent studied in another region than the one where they lived before starting their studies but after graduation returned to their home area. Only 4 percent studied in their home region and after graduation moved to another. Fourteen percent attended a higher education institution in another region and also found employment there. Finally, 26 percent were mobile, both when changing from secondary to higher education and when changing from studies to employment.[33] This means that approximately nine-tenths of those who studied in their home region also find employment regionally, while the options of those who studied somewhere other than where their parents lived were completely flexible with regard to the place of subsequent employment. This study and employment behaviour certainly will not encourage *Länder* governments to simply leave it to the other *Länder* to ensure adequate enrolment capacities.

The nation-wide coordination of the essentials of study examination regulations is justified by precisely the fact that all graduates of higher education institutions should have the chance to change institution at any stage of their

studies and subsequently work anywhere in the Federal Republic of Germany. Certain restrictions exist only in those professions where governments are the major employers. Although the ministers of Education and Cultural Affairs have recommended very far-reaching guidelines for teacher training, some teachers find it difficult to have their state examinations recognized in other *Länder*. It is usually recommended to students who will later work in public judicial areas or in public administration to see to it that they spend at least the second half of their period of studies, and to sit for the final examination, in the *Land* where they later want to work.

CURRENT ISSUES

It is very widely felt in the Federal Republic of Germany that the large number of bodies and coordination requirements have resulted in a situation that makes major innovations of the system difficult.[34] A typical example is the slowness of decision processes in the attempt to reduce the average length of studies.[35] For years it has been said that an average of seven years as the period between commencement of studies and graduation with a higher degree was completely unacceptable, but no agreement on far-reaching measures has yet been achieved.

This does not mean, however, that there are indications of extensive decentralization. It is true that it has been recommended to the various institutions of higher education to look for special emphases and to test their strengths and weaknesses in competition with other such institutions.[36] However, when significant changes are actually proposed, mechanisms of nation-wide coordination obviously are valued very highly.

A typical example is the recent development in the systematization of graduate studies. In the Federal Republic of Germany, approximately one out of seven higher education graduates subsequently obtains a doctoral degree. More than 10 percent of the graduates even after graduation continue to attend a higher education institution for advanced courses, etc. There are, however, hardly any graduate schools or graduate programs. As before, the usual approach is the individual monitoring of dissertations by individual professors and the independent studies of the aspiring doctoral candidates.[37] For years, however, the establishment of doctoral programs at selected departments has been recommended, among other things with the intention of reducing the length of studies required for a first degree.[38] Finally, as the result of years of political negotiations, in 1990 funds were made available to the German Research Association for a model experiment on the establishment of graduate colleges. These funds are designed to assist approximately 75 departments or interdepartmental networks (within the framework of existing universities) with money, fellowships, guest lectures, equipment, etc., for a period of three

years. In the awarding of funds, the criteria will be not only the readiness to offer course programs for doctoral students and the quality of research, but also the achievement of work sharing between higher education institutions on a national basis: assisting similar priority subjects at several institutions is to be avoided.

The unification of Germany is another example of the high value placed on nation-wide coordination despite all the emphasis on *Länder* autonomy. The Science Council made it amply clear to the "new *Länder*" that their chances of receiving assistance with the future development of their higher education institutions would depend largely on how willing they would be to adapt, as quickly as possible, to the types of institutions, staff structures, staff-student ratios, etc., that the Science Council usually recommends for the *Länder* of the Federal Republic of Germany. The Science Council also "recommended" to the new *Länder* to establish, for several years, commissions on the structure of higher education institutions; these commissions would be composed mainly of external experts (i.e., not from the *Länder* of the former German Democratic Republic) and would for a period of several years assume the rights of restructuring departments, of establishing search committees, etc. — rights that normally are exercised by the Senate of higher education institutions. Finally, the Science Council itself established commissions that are to evaluate the overall situation with regards to fields of study at higher education institutes and research institutes in the territory of the former German Democratic Republic, and to recommend measures for their future structure. This is intervention on a large scale: experts estimate that in the process of restructuring about half the scholars in the East will lose their jobs although there is a consensus that the total number of academic staff after restructuring could not be smaller than in 1990.

CONCLUSION

In some areas, nation-wide coordination traditionally was considered natural in the Federal Republic of Germany, such as international education matters, or the promotion of science. As in many other countries, the federal government could easily step in and extend its functions in higher education, such as when additional funds were needed for the expansion during the 1960s. Although a "power of the purse" was not accepted in legal terms, legal revisions were nevertheless made when the need for federal financing was recognized.

The major rationale for nation-wide coordination was the constitutional aim of preserving "uniform living conditions." If we make an international comparison of the system-wide coordination of higher education in other federal systems it becomes apparent that a relatively high degree of "uniformity of living conditions" is considered important in the Federal Republic of Germany.

Cultural diversity is permissable but it is generally considered undesirable to establish regional barriers concerning access to education and to any form of employment. Also, nation-wide coordination might be justified, because supervision of education at the *Land* level does not necessarily lead to diversity reflecting regional cultural characteristics. Rather, the individual *Land* chooses one of the major reasonable options. Therefore, a coordination as regards such experimentation or the range of different options might be considered desirable.

This aim of preserving uniform living conditions could theoretically be achieved by a small amount of coordination of all aspects of higher education. There is a definite preoccupation in Germany, however, with coordinating equivalences of credentials as well as with admissions because of the tradition of uniform standards and rights gained from final examinations and degrees. In addition, quantitative and structural policies should have guaranteed, in the process of expansion during the 1960s and 1970s, more or less similar study opportunities and more or less similar quality standards in all *Länder* of the Federal Republic of Germany. The desire for such coordination finally was reinforced by the student protests and the subsequent reform movement at German universities in the late 1960s and early 1970s. The variety of proposals for curricula reform, decisionmaking procedures, teaching staff patterns, etc. were responsible for the introduction of a wave of *Länder* laws. As each *Land* selected its own specific regulations, a heterogeneity of the system of higher education could be expected within a few years which would hinder mobility and prevent "uniformity of living conditions."

In the Federal Republic of Germany, nation-wide coordination of higher education takes place in only a few areas through sole federal activities. Federal actions with regard to higher education are undertaken primarily within the framework of "joint tasks" of Federal-*Länder* governments as laid down in the constitution. Assistance for higher education construction, federal payment of most of the costs of scholarships, and federal assistance for university research operate largely within the framework of "joint tasks," and the overall quantitative and structural higher education planning is based on the understanding that it is a joint task of the federal and *Länder* governments. Nation-wide coordination of higher education in the Federal Republic of Germany, however, very often also takes the form of inter-*Länder* cooperation, i.e., with only advisory rather than active participation by the federal government. This was the case even before the 1969 constitutional amendment to expand the joint Federal-*Länder* tasks in the areas of planning and financing of higher education and became even more true after 1976 when the *Länder* endeavoured to again restrict the federal role in nation-wide cooperation of higher education.

In the 1980s the importance of nation-wide coordination appeared to wane in the sense that hardly any expansion of resources took place and increased individual initiatives of individual institutions of higher education were to be

encouraged. Actually, great value continued to be attached to nation-wide cooperation, clearly exemplified by the establishment of graduate colleges in 1990 and the development of higher education policy with regard to the "new *Länder*" since the unification of Germany in the fall of 1990. But, even if reunification did not reinforce the established mix of *Länder* powers and system-wide coordination, this mix most likely would have persevered in the foreseeable future. For belief seems to be deep-rooted that a balanced negotiation is more appropriate than any other visible or invisible power structures.

The balancing act between decentralized financing and supervision of higher education on the one hand and strong mechanisms of nation-wide coordination on the other hand have in Germany led to a more uniform distribution of high-quality higher education facilities and of research potentials throughout the entire country than is the case perhaps in any other major industrial society. On the other hand, the mechanisms of coordination have become unwieldy where major innovations are required. No doubt we will have to look for new forms, stimulating a variety of innovations that are bound to lead to increased diversity of the higher education system while remaining compatible with the principle of uniform living conditions.

NOTES

1. In July 1981 the International Council for Educational Development and the Aspen Institute for Humanistic Studies jointly organized the seminar on "The Management of Higher Education Systems: Federal, State and Institutional."
2. An interesting attempt at systematizing nation-wide coordination and the role of federal agencies in it was made by Michael Bothe et al. in *Die Befugnisse des Gesamtstaates im Bildungswesen*, Series Bildung und Wissenschaft, no. 9 (Bonn: Bundesminister für Bildung und Wissenschaft, 1976).
3. As regards the experiences until the early 1980s, see Ulrich Teichler, "Federal Systems of Higher Education — The Case of the Federal Republic of Germany," in *Higher Education in the Federal Republic of Germany* (New York and Kassel: Centre for European Studies, Graduate School and University Centre of the City University of New York and Wissenschaftliches Zentrum für Berufs- und Hochschulforschung der Gesamthochschule Kassel, 1986).
4. See Hansgert Peisert and Gerhild Framhein, *Systems of Higher Education: Federal Republic of Germany* (New York: International Council for Educational Development 1978), pp. 25-84.
5. Ibid, pp. 29-46. See also the following more recent overviews: Max Planck Institute for Human Development and Education, *Between Elite and Mass Education: Education in the Federal Republic of Germany*, Chapter 12 (Albany, NY: State University of New York Press, 1983); Aylâ Neusel and Ulrich Teichler (eds.), *Hochschulentwicklung seit den sechziger Jayhren* (Weinheim and Basel: Beltz, 1986); Ludwig Gieseke, *Into the Future by Tradition* (Bonn: Inter Nationes, 1987);

Christoph Oehler, *Hochschulentwicklung in der Bundesrepublik seit 1945* (Frankfurt and New York: Campus, 1989); Dietrich Goldschmidt, "Hochschulpolitik 1945-1989," in *Die Bundesrepublik Deutschland*, W. Benz, ed., vol. 1 (Frankfurt, Fischer, 1989), pp. 354-389; Christopher Fuehr, *Schools and Institutions of Higher Education in the Federal Republic of Germany* (Bonn: Inter Nationes, 1989); Ulrich Teichler (ed.), *Das Hochschulwesen in der Bundesrepublik Deutschland*, (Weinheim: Deutscher Studien Veriag, 1990); Hansgert Peisert and Gerhild Framhein, *Das Hochschulsystem in der Bundesrepublik Deutschland* (Bonn: Bundesminister für Bildung und Wissenschaft, 1990); Barbara Kehm and Ulrich Teichler, "Higher Education in the Federal Republic of Germany," in Burton R. Clark and Guy Neave (eds.), *Encyclopedia of Higher Education* (Oxford: Pergamon Press, 1992); Beate Krais and Jens Naumann, "Higher Education in the Federal Republic of Germany," in Philip G. Altbach (ed.), *International Higher Education: An Encyclopedia* (New York: Garland, 1991), pp.685-709; cf. also the major bibliography on research on higher education in Germany: Albert Over, *Die Deutschsprachige Forschung über Hochschulen in der Bundesrepublik Deutschland: Eine kommentierte Bibliographie, 1965-1985* (München: K.G. Saur, 1988).

6. See the Secretariat of the Standing Conference of Ministers of Education and Cultural Affairs of the *Länder*, *The Educational System in the Federal Republic of Germany* (Bonn: German Academic Exchange Service, 1982), pp. 9-12.
7. See Ludwig Huber, "Überregionale Selbstverwaltungsorganisationen," in Ludwig Huber (ed.), *Enzyklopaedie Erziehungswissenschaft*, vol. 10 (Stuttgart: Klett-Cotta, 1983), pp. 694-98.
8. See Joachim Nettelbeck, "Forschung an Hochschulen," in Ulrich Teichler (ed.), *Das Hochschulwesen in der Bundesrepublik Deutschland* (Weinheim: Deutscher Studien Veriag, 1990), pp. 211-35.
9. Rolf Berger, *Zur Stellung des Wissenschaftsrates bei der wisenschaftspolitischen Beratung von Bund und Ländern* (Baden-Baden: Nomos, 1974).
10. Peisert and Framhein, *Systems of Higher Education*, pp. 40-45.
11. Bund-Länder-Kommission für Bildungsplanung und Forschungsfoerderung, *Zwischenbilanz "Fünf Jahre Modellversuch im Hochschulbereich"* (Bonn, 1977).
12. See the revised versions published in 1986: *Framework Act for Higher Education* (Bonn: Bundesminister für Bildung und Wissenschaft, 1986).
13. See the overview on the role of Fachhochschulen, in German Academic Exchange Service (ed.), *Studies at Fachhochschulen* (Bonn: 1982); Wolfgang Mönikes, *More Practice for Future Profession: The Fachhochschulen in the Federal Republic of Germany* (Bonn: Inter Nationes, 1988); Ulrich Teichler, *The First Years of Study at Fachhochschulen and Universities in the Federal Republic of Germany* (Kassel: Wissenschaftliches Zentrum für Berufs- und Hochschulforschung der Gesamthochschule Kassel, 1990) (*Werkstattberichte*, No. 28); cf. also relevant parts in Ulrich Teichler, *Changing Patterns of the Higher Education System* (London: J. Kingsley, 1988); Claudius Gellert, "Alternatives to Universities in Higher Education. Country Report. Federal Republic of Germany" (Paris: OECD, 1989) mimeo.

14. See Aylâ Neusel and Ulrich Teichler, "Comprehensive Universities — History, Implementation Process and Prospects," in Harry Hermanns, Ulrich Teichler and Henry Wasser (eds.), *The Complete University* (Cambridge, MA: Schenkman, 1983), pp. 175-95.
15. See the analyses of study reform commissions and their impacts both on federal and *Länder* level by Norbert Kluge and Aylâ Neusel, *Studienfreform in den Ländern, Studien zu Bildung und Wissenschaft des Bundesministers für Bildung und Wissenschaft*, no. 4 (Bad Honnef: Bock, 1984); Ulrich Schreiterer, *Politische Steuerung des Hochschulsystems* (Frankfurt and New York: Campus, 1989).
16. See the overview on planning approaches in higher education in Hans Brinkmann, "Quantitative und strukturelle Planung des Hochschulwesens" in Huber, ed., *Enzyklopaedie*, pp. 253-64; Wolff-Dietrich Webler, "Forschung und Hochschulpolitik und -planung des Staates, der Verbände und sozialer Bewegungen," in Dietrich Goldschmdit, Ulrich Teichler and Wolff-Dietrich Webler (eds.), *Forschungsgegenstand Hochschule* (Frankfurt and New York: Campus, 1984), pp. 233-74; Oehler, *Hochschulentwicklung*.
17. Bund-Länder-Kommission für Bildungsplanung, *Bildungsgesamtplan*, 2 vols. (Stuttgart: Klett, 1973-74).
18. Bundesminister für Bildung und Wissenschaft, *Strukturprobleme des Bildungssystems im Bundesstaat* (Bonn: 1978).
19. Dorothee Wilms, *Differenzierung und Wettbewerb im Hochschulsystem* (Bonn: Bundesminister für Bildung und Wissenschaft, 1983); cf. also Wissenschaftrat, *Empfehlungen zum Wettbewerb im deutschen Hochschulsystem* (Köln: 1985).
20. See Thomas Finkenstaedt, "Lehre und Studium" in Ulrich Teichler (ed.), *Das Hochschulwesen in der Bundesrepublik Deutschland* (Weinheim: Deutscher Studien Veriag, 1990), pp. 153-77.
21. Cf. also the critique voiced by Olaf McDaniel, Pierre Gauye and Jacques Guin, "Government and Curriculum Innovation in the Federal Republic of Germany," in Frans A. Vught (ed.), *Governmental Strategies and Innovation in Higher Education* (London: J. Kingsley, 1989), pp. 125-42.
22. Since the early 1980s, the federal government has not subsidized grants for graduate students.
23. See the overview on course programs and degree in Deutscher Akademischer Austauschdienst, *Degree Courses at Institutions of Higher Education in the Federal Republic Germany* (Bad Honnef: Bock, 1988).
24. See Kluge and Neusel, *Studienfreform in den Ländern*, pp. 149-50.
25. Ibid., pp. 136-48
26. For explanation of the legal aspects of higher education, see Christian Flaeming et al. (eds.), *Handbuch des Wissenschaftsrechts*, 2 vols. (Berlin: Springer, 1982).
27. Peisert and Framhein, *Das Hochschulsystem in der Bundesrepublik Deutschland*, p. 29.
28. See the arguments of David M. Cameron in "Higher Education in Federal Systems: Canada," this volume, p. 58.

29. Ulrich Teichler, "Higher Education Quality and the World of Work," in Trudy W. Banta et al. (eds.), *Proceedings of the Second International Conference on Assessing Quality in Higher Education*, (Knoxville, TN: Centre for Assessment Research and Development, 1990), pp. 135-52; cf. also the overview on research on the quality of research in Hans-Dieter Daniel and Rudolf Fisch (eds.), *Evaluation von Forschung* (Konstanz: Universitätsverlag Konstanz, 1988).
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31. For information on student behavior, cf. Tino Bargel et al., *Studiensituation und studentische Orientierungen an Universitäten und Fachhochschulen* (Bad Honnef: Bock, 1988); Ulrich Teichler et al., *Hochschule — Studium — Berufsvorstellungen* (Bad Honnef: Bock, 1987); Leszczensky and Filaretow, *HIS Ergebnisspiegel 1990*.
32. Leszczensky and Filaretow, ibid., pp. 308-9.
33. Ulrich Teichler and Helmut Winkler, eds., *Der Berufsstart von Hochschulabsolventen* (Bad Honnef: Bock, 1990), pp. 44-46.
34. For recent discussion on higher education policy, see: Wissenschaftsrat, *Empfehlungen des Wissenschaftsrates zu den Perspektiven der Hochschulen in den 90er Jahren* (Köln, 1988); Westdeutsche Rektorenkonferenz, *Die Zukunft der Hochschulen: Überlegungen für eine zukunftsorientierte Hochschulpolitik* (Bonn, 1988).
35. On the length of studies, see: Peisert and Framhein, *Das Hochschulsystem in der Bundesrepubublik Deutschland*, pp. 57-62; cf. also Wissenschaftsrat, *Empfehlungen zur Struktur des Studiums* (Köln, 1986); *Studienzeiten auf dem Pruefstand* (Hannover: Hochschul-Informations-System, GmbH, 1988).
36. Cf. the information provided in: *Differenzierung und Wettbewerb im Hochschulbereich* (Bonn: Westdeutshe Rektorenkonferenz, 1984); *Leistungsbeurteilung und Leistungsvergleich im Hochschulbereich* (Bonn: Westdeutsche Rektorenkonferenz, 1989).
37. Hanno Hertz, *Studium nach dem Studium* (Bad Honnef: Bock, 1987); Rolf Holtkamp, Karin Fischer-Bluhm and Ludwig Huber, *Junge Wissenschaftler an der Hochschule* (Frankfurt and New York: Campus, 1986).
38. Wissenschaftsrat, *Empfehlungen zur Struktur des Studiums*.

Higher Education in Federal Systems: Belgium

Ignace Hecquet

FEDERALISM IN BELGIUM[1]

Some Background

In organizing the transfer of all jurisdiction over education to the Communities, the constitutional reform of 1988 embodies, from the standpoint of the purposes of this colloquium, an essential stage in the as yet incompleted process of federating the Belgian state. If we accept that a state cannot be truly federal without genuine financial autonomy for its constituent entities, the January 1989 laws relating to the finances and fiscal capacity of the Communities and Regions represent important milestones in the process.

These steps are the outcome of nearly 20 years of legislative efforts, preceded by two other constitutional reforms (1970 and 1978) and repeatedly interrupted by developments sparked by changes in the relative influence and strategies of opposing political forces.[2] This painfully constituted legislative structure is itself built on several decades of progressive affirmation — or reaffirmation[3] — of community and regional identity.

The 1831 constitution, approved six months after Belgian independence, made Belgium a unitary, constitutional, francophone state. In the course of the nineteenth century, Belgian society gradually coalesced into around three parallel, all-embracing worlds:[4] the Catholic world, the liberal world and, later, owing in particular to universal suffrage and the system of proportional representation, the socialist world. Even today, trade unions, mutual benefit societies, cooperatives, newspapers and cultural and sporting associations still gravitate around each of these three poles.

In reaction to the governing francophone class and French as the sole official language, a movement of cultural and linguistic self-affirmation appeared in

Flanders in the nineteenth century. Universal suffrage, introduced in 1919, gave the Flemish people an awareness of their own numbers and, consequently, of their real political influence. Linguistic Regions were set up in 1921 and strengthened by legislation passed in 1932.

Wallonia, aware that since the end of World War II it was in turn becoming a political and economic minority, also sought to affirm its identity. In Brussels, the capital, which had over time become increasingly French-speaking because of an influx of Walloons and large numbers of foreign immigrants, the confrontation between francophones and Dutch speakers crystallized mainly around the issue of the rights of the Dutch-speaking minority and the widening of territorial boundaries demanded by the francophones.

The electoral upsurge of the so-called "community" parties, along with growing linguistic tensions within the traditional parties, precipitated acceptance of a federal solution as the only way out of the impasse without breaking down the country's territorial and institutional unity. As early as 1970 the Belgium prime minister told the Parliament that "the unitary state, with its structures and operations as governed by law, has now been overtaken by events."

A Belgium of Communities and Regions

The illustration in Appendix 1 shows contemporary Belgian institutions at each level of government. The map in Appendix 2 shows the community and regional structure of Belgium.[5]

Belgium has four Linguistic Regions: three unilingual (Dutch-speaking, French-speaking and German-speaking) and one bilingual (Brussels). This division along linguistic lines determines the entire internal structure of the country.

The outline below shows the link between Linguistic Regions, Regions and Communities.

Regions

Flemish: Dutch-speaking Region
Walloon: French- and German-speaking Region
Brussels: bilingual Region of Brussels

Communities

French: French-speaking Region and bilingual Region of Brussels
Flemish: Dutch-speaking Region and bilingual Region of Brussels
German: German-speaking Region

In terms of the distribution of powers among the three levels of government — state, Communities and Regions — the legislators opted for a system of exclusive devolution with, however, a few exceptions of shared and concurrent jurisdiction. Scientific research is one of the examples of nonexclusive jurisdiction, as we will see later on. As well, until the problem is settled as part of the "third phase of State reform" (which is at the top of the political agenda for the spring of 1991), "residual" powers belong to the central government.[6]

The three levels of government are on an equal footing in terms of the hierarchy of decisionmaking: a community or regional decree has the same legal force as a law passed by the central government. Each level of government acts totally on its own discretion in its area of jurisdiction. An arbitration court has been given the role of resolving any future conflicts.

Before discussing the concrete powers devolved to each level, it would be useful to mention a particular feature of Belgian federalism called "asymmetry": a constitutional provision, approved in 1980, entrusted to Flemish Community institutions the exercise of powers devolved to the Flemish Region. The possibility of a similar fusion in the case of Walloon regional institutions and French Community institutions is raised on a regular basis, and it is now being revived — as we will see later — because of the budgetary difficulties encountered by the French Community in 1990 in financing its educational system.

To simplify the situation, we can say that the Communities' powers arise from the criterion of belonging to a human grouping, whereas the Regions' powers flow from the notion of geographic location. The Communities have six recognized areas of jurisdiction: (a) cultural matters; (b) education; (c) language use; (d) individual matters; (e) co-operation; and (f) scientific research, which is an accessory jurisdiction related to the exercise of the five other areas of jurisdiction.

The notion of individual matters flows from the principle that community autonomy should cover all fields involving the individual; thus, individual matters are the opposite of local matters which, as we have just noted, come under regional jurisdiction.

In terms of educational jurisdiction, which is of particular interest here, the central government has retained jurisdiction over the following three areas: setting the beginning and end of the school year, the minimum conditions for granting diplomas, and the staff pension plan.

With Belgian society so compartmentalized in many ways, and in particular with its multiplicity of school systems (free and official, and within the official system, state, provincial and communal systems), the devolution of educational jurisdiction to the Communities was accompanied by a multitude of legal and constitutional safeguards designed to maintain the climate of educational peace attained with the pact of 1959, which proclaimed the right to establish schools and the freedom to choose schools.

Jurisdiction devolved to the Regions consists principally of regional development, the environment, housing, water, energy and the economy; however, regional authority over the latter two areas is limited by a number of exceptions for which the central government maintains control; as well, the Regions have jurisdiction to institute and exercise normal supervision over the provinces and communes.

The central government's jurisdiction lies in the areas of economic, monetary and fiscal policy, justice and national defence, social security, pensions and public health; as well, residual power and jurisdiction devolve to it to a limited degree in community and regional matters.

Financing of the Communities and Regions

The laws approved in January 1989 concerning the finances and patrimonial regime of the Communities and Regions were the determining factor in the actual transfer of jurisdiction devolved the preceding year. The total budget which was transferred represented approximately Bel.Fr.610 billion, or 31 percent of the Belgian state's total budget. This percentage was only 7 percent just before the law came into force. Out of the total of 610 billion, education alone accounted for Bel.Fr.291 billion, or 48 percent.

If the Belgian federal system seems complicated to the majority of Belgians, the mechanisms designed to ensure that the decentralized entities have the fiscal resources they need to exercise their jurisdiction are doubly so. In brief, the constitutional reform of 1988 and the law of 1989 opted for a system combining specific income taxes and national tax rebates. In theory, rebates are calculated on the basis of the amount of tax collected in the Regions; mechanisms for joint responsibility have been set up and there is a ten-year transition period to ensure continuity between the system in force in 1989 and the emergence of the fully-developed system.

In the particular case of funding for education, the January 1989 law transferred to each of the Communities a package of resources on the basis of the budget situation existing before the transfer (1987); the recurring part of these resources comes from a portion of the revenue from the value added tax (VAT), a percentage of revenue from individual income tax, and a credit the purpose of which is to provide funding for foreign students (discussed later in this chapter). The amount of and changes to the portion of VAT revenue are not based on the volume of that revenue, but on expenditures incurred by the national government during the reference year and on inflation and demographic factors during a transition period. Once the system is fully developed, and in order to uphold the principle of equal treatment for children in the north and the south of the country, funding will be allocated between the Communities according to student numbers and objective criteria still to be defined.

We note that the Communities are entirely free to allocate these transfers within their respective budgets as they see fit and thus to use for education their other resources from taxation and other sources, or to borrow.

HIGHER EDUCATION IN FEDERATED BELGIUM

The General Structure of Higher Education

In Belgium, as in the Netherlands and Germany, higher education has always been structured along the lines of two major types of institutions: on the one hand, universities and university level institutions, and on the other, vocational and technical institutions which, to distinguish them from the first type, are usually grouped together under the name of nonuniversity higher education. University education is governed mainly by two laws:

- the law of 11 September 1933 regarding the protection of higher education diplomas;
- the coordinated laws on the awarding of academic degrees and the program of university examinations.

A law passed in 1970 established the current division of higher education into three sectors, based on educational goals:

- university education, centred on theoretical training in connection with research;
- a long course of university-level higher education (at least four years), emphasizing high-level scientific and technical training, but centred on application rather than research; and
- a short course of higher education, more directly focused on immediate occupational needs.

In accordance with the constitutional principle of educational freedom mentioned above, institutions of higher education and other levels of education belong, depending on who administers them, to one of the following three systems:

- the state system, transferred to the Communities in 1989;
- the system run by the provinces or communes, referred to as the subsidized official system; and
- the free system, which includes privately-run institutions, usually Catholic; to receive public funding and grant recognized diplomas, these institutions must comply with legal and regulatory provisions.[7]

The central government has remained the organizing power of only one institution of higher education: the *École royale militaire* [Royal Military School]. As well, using a provision drawn up in the last constitutional reform, the Flemish Community has delegated its authority as organizing power of its school system, except for its two universities, to a *Conseil autonome de l'enseignement communautaire* (Autonomous Council for Community Education).

Finally, despite the "communitarization" of university and nonuniversity higher education, the two types continue to differ in a number of important ways, including:

- the funding mechanism (which will be discussed below in the section on financing);
- the status of teachers; and
- the means of Community (previously state) control over various aspects of administering the institutions.

The table in Appendix 3 presents a chart of Belgian institutions of higher learning; recent student population figures relating to the three sectors of higher education, in both the north and south of the country, are also given.

Emerging Community Features

It is thus apparent that from the beginning, the education problem has been a particularly sensitive aspect of Belgian politics, for reasons of both ideology (freedom of education) and language (language use in a given area). Institutions of higher education, and especially the universities, breeding grounds for the elite, have often been the sounding box, and sometimes even the spark, for the Communities' crisis. To give just two examples, there was the emotional climate that reigned following World War I when the *Université de Gand* (University of Ghent) converted from French unilingualism to bilingualism, and finally to Dutch unilingualism; more recently, there was the Flemish demand of "Walloons Out" (i.e., of the Flemish territory) of the *Université catholique de Louvain* (Catholic University of Louvain), which came to a head in 1968, and was resolved in a Belgian-style compromise when the central government transferred the French-language section of the University to Wallonia, and created a Flemish university in Brussels by dividing the *Université libre de Bruxelles* (Free University of Brussels) into two sections.

In terms of administering the higher education system, community awareness has gradually come to the fore. At the executive level, the *Ministère de l'Instruction publique* (Department of Public Instruction) was subdivided along linguistic lines in 1939. In 1961, the *Ministère de l'Éducation nationale* (National Department of Education) was divided in two, and in 1980, these two

national departments yielded a part of their jurisdiction, by then smaller, to two Community departments. The 1988 reform saw the disappearance of the entire department of national education.

This division along linguistic lines is found within the consultative structures set up by the law of 1970 relating to the organization of higher education. These structures are the *Conseil permanent de l'enseignement supérieur* (Standing Council on Higher Education) — made up of university rectors, presidents and vice-presidents of superior councils and administration representatives — and the seven superior councils specific to each educational track — technical subjects, economics, agriculture, social services, ancillary medical subjects, education and art. The two standing councils meet together to consider problems of national concern.

There still exists today a national consultative body, the *Conseil national de la politique scientifique* (National Council on Scientific Policy), which is responsible for organizing interuniversity consultation between the institutions, the government and various sectors of social and economic life. But in the early 1980s, each of the two large Communities also set up councils to organize interuniversity consultation. These councils are called the *Vlaams Interuniversitair Raad* (VLIR) and the *Conseil inter-universitaire de la Communauté française* (CIUF) (French Community Interuniversity Council). Unlike the superior councils mentioned above, these two organizations were quite different legally and organizationally from the very beginning.

A New Chance for Planning?

Like most systems of higher education in industrialized countries, Belgian higher education experienced its "Golden Sixties." In the university sector, the main feature of the period was the adoption of the "expansion laws" and a law granting subsidies to institutions for student facilities and social services (housing, dining halls and so forth).

After 1975, the economic crisis pushed the issues of goals, structure and access into the background, and concerns for short-term financial savings dominated. The last document which attempted to give general consideration to universities and their role in the higher education system was the *Conseil national de la politique scientifique*'s "new university strategy," which dates from 1976. In terms of legislation, the only amendments put forward have been introduced as part of budget legislation and royal decrees issued under "special powers."

However, this "non-policy of university education," as a sociologist[8] termed it in 1983, cannot be blamed entirely on the government's deteriorating financial situation. Here as well, as noted in a report, again provisional and prepared as part of the review of Belgian educational policy currently being conducted

by the OECD, "political action in educational matters is limited and is only possible on the sole condition of not disturbing two fragile equilibriums, the linguistic equilibrium and the philosophical equilibrium."[9] Any attempt at basic reform introduced on the initiative of public authorities over the past 15 years has usually foundered because of the fear of endangering these two equilibriums.

Does the fact that each Community is today master of its own educational policy augur a starting point for new initiatives on the part of public authorities, in cooperation with institutions of higher learning and educational circles?

Obviously, it is too early to say. With regard to the Flemish Community, an ambitious draft decree on university education has recently been passed, having to do with educational mission, the exact location of educational tracks in the various institutions, rules for access and granting of diplomas, staff status and compensation, quality control of activities and financing and control mechanisms.[10] The initiatives taken until now in the French Community have been more limited in their goals, being aimed at granting autonomy to the universities for which the Community is responsible: researcher status and, more particularly, measures to finance research.

THE FUNDING OF HIGHER EDUCATION

General Principles

Although both are related to the number of students, the funding system for universities and university-level institutions is significantly different from the system for nonuniversity education.

In the latter case, the formula uses norms for calculating the full-time teaching load for each institution, based on the number and size of academic sections. The mechanisms are different, depending on whether the course is long or short.[11] Public authorities have direct responsibility for compensating various categories of personnel, whether the institution is run by the Community or subsidized.

As far as university education is concerned, the funding system still in force in the two Communities today is the one established by the law of July 1971. Whether the institution is official or free, its annual basic funding is calculated on the basis of the number of students, counted according to specific criteria: nationality, basis of admission, and features of the course of study. The amount of subsidy, allocated per student, is weighted according to the educational track and is in theory indexed every year to reflect changes in compensation and the general price index. The application of the general formula is carried out within

the limits of minimum and maximum levels, according to the principle of fixed costs and economies of scale.[12]

The expected merits of this law, adopted under budgetary conditions that were still favourable, were mainly the clarity of the formula (an important criterion in the Belgian context), improved adjustment of the amount of funding to the objective needs of education, and the opportunity for institutions to better plan their development.

The crisis in public finances quickly led to disenchantment. The government tried to adjust the overall amount of subsidy for distribution to the actual availability of funds by changing the parameters of the formula. It limited the indexation rate, imposed more restrictive norms for counting students for funding purposes, made changes in academic orientation and abandoned the lower limit for the number of undergraduates.

Forcing institutions to increase students' enrolment fees was another, although not nearly as important, way of limiting government commitments. The fee increase was mainly designed to compensate for reductions in grants for student services expenditures, which are also calculated on the basis of the number of students. On the basis of changes in unit grants in other educational sectors, universities have the impression of having been particularly hard hit by the funding crisis: in relation to 1975, the unit grant per student has dropped by 29 percent for universities, but it has fallen by only 12 percent for the non-university sector and not at all for secondary education. As we will see in the next section, this assessment warrants more subtle analysis if we take into account the development of public funding of university research.

Towards More Fundamental Reform of the Funding Mechanism?

The mechanisms of the law of 1971 were originally designed to ensure that institutions' funding levels were commensurate with their objective needs, but gradually they were applied only as a method of distributing an overall resource envelope, previously determined on the basis of government financial constraints and priorities.

With restrictions on the overall envelope, the system's application created tensions between the French- and Dutch-speaking university sectors over the sharing of the pie. The tensions crystallized principally over the following two points.

When the law of 1971 came into force, those institutions which, under the formula, should have received a lower subsidy than they were receiving before were given the benefit of acquired rights. The expected growth in the number of students was to eliminate the discrepancy later on. In fact, this did not materialize, partially as a result of amendments made to the formula described

above. The situation appeared to benefit the francophone sector more than the Dutch-speaking one, and this was all the more regrettable since the development of the Dutch-speaking sector was being compromised at a time when the number of students was growing faster in that sector. As one of the measures taken by the authorities in 1982 to make universities "stabilize" their long-term finances, the system of guaranteed rights and lower limits for the number of undergraduates was abolished.

Another point of contention was the method of counting foreign students for funding purposes. In the early 1980s, francophone institutions experienced a particularly rapid influx of students from developing countries, while the percentage of foreign students enrolled in these institutions already represented over 80 percent of foreign students studying in Belgium. The solution to the problem was to set a ceiling and a guideline for distribution between the two Communities of the resource envelope for development aid, from which funding is provided to these students.

When education was "communitarized," legislators took into account the larger numbers of foreign students in francophone universities. Funding for students studying in Belgium under cooperation agreements continues to be provided out of the national budget for development aid. For other categories of foreign students who meet the conditions for subsidy, a sum of Bel.Fr.1.5 billion was included in the 1989 budget and divided between the two Communities as follows: 1.2 billion for the French Community and 300 million for the Flemish Community. Beginning in 1990, this amount will be indexed and will in theory be the subject of consultation between the government and the Communities.

On a more basic level, there is general agreement in both the north and south of the country that the development of the higher education system can no longer remain at the mercy of financial criteria alone, and that it is urgent to change perspectives somewhat. To give only two examples, the current funding structure is seen as a hindrance to the innovative development of educational tracks and, at least in the French Community, hardly appears adapted to meeting the needs for higher education.

In this regard, the decree on universities passed by the Flemish Community has the virtue of seeking to correlate the goals of university education, the organization of activities and the problems of allocating human and financial resources. Strictly in terms of the funding mechanism, the Flemish Community's proposal is to calculate an annual allocation for each institution, consisting of two parts:

- a fixed, or lump sum, part, set at the start for each institution in relation to the prevailing situation; and

- a variable part calculated on the basis of teaching load, itself calculated on the basis of a formula that is fairly close to that of the law of 1971.

One innovation should be highlighted: in terms of calculating the teaching load, different weights are proposed according to whether the student is full-time or part-time. However, under the system established by the law of 1971, only full-time students are considered, although institutions have been able to have certain arrangements accepted that are designed to modulate the period of study. The idea of part-time funding was first suggested in 1976 by the *Conseil national de la politique scientifique* in its "new university strategy." In addition, a distinction between "initial" and "post-initial" education, with their respective definitions, has been suggested.

While it respects the principle of funding based on objective criteria, which are guarantees of transparency for institutions belonging to more than one system, the decree contains a new development as far as "complete" universities are concerned[13] — it decrees the list of diplomas each of the institutions is entitled to grant and, consequently, the educational tracks it can organize.

This discussion of the funding formula itself must not blind us to the important challenges that will face higher education in both Communities in this decade. One initial challenge is to allow for the replacement — early, insofar as that is possible — of a sizable portion of the teaching staff who were recruited during the years of expansion and will reach retirement age at the turn of this century; in the Belgian context, the solution to this problem requires imagination, flexibility and courage from the public institutions and authorities. Increasingly, a revaluation of remuneration paid to university staff seems unavoidable, if this massive turnover is not to affect quality adversely. With regard to capital investments, measures for the upkeep of buildings and replacement of large equipment are indispensable. Funding for higher education is a third problem that requires a stable solution adapted to its particular characteristics. Will it be possible to solve these various problems within a budget envelope of a constant number of francs, as is usually thought in certain political circles?

All these decisions must be made in an overall context — more visible in the French Community — of a crisis in education and uncertainty among teaching staff. Traumatized by the impact of the Val Duchesse measures,* taken in 1986, and by pessimistic forecasts of changes in the financial resources of the French Community over the next decade, the teaching staff in that Community took strike action at the beginning of the 1990-91 school year that lasted several months.

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* The Val Duchesse measures were named for the location where decisions were taken to initiate special powers with the force of law to impose rationalization, translating into employment reductions.

PLANNING AND FUNDING OF RESEARCH[14]

Making Up for Time Lost

In Belgium, most basic research is conducted in the universities. Although the public sector manages a certain number of scientific institutions, most public funding for basic research is directed to supporting university research programs.

At the national level, the *Ministère de la Politique scientifique* (Department of Science Policy) and the *Secrétaire d'État* (Secretary of State) still provide incentive and coordination for the nation's science policy: incentive with regard to the science policy budget as such, which is managed by the *Services de programmation de la politique scientifique* (Science Policy Programming Services); and coordination for research activities funded on the initiative of various government departments. In 1988, the national budget envelope for science policy amounted to nearly Bel.Fr.60 billion, of which 7 billion were allocated to the envelope managed by the *Services de programmation de la politique scientifique*. It should be noted that the amount of Bel.Fr.60 billion included nearly 30 billion that were allocated to universities funded under education budgets. Approximately one-third of the Bel.Fr.60 billion remained under national government control.[15]

For over ten years, the *Conseil national de la Politique scientifique* (National Council on Science Policy), supported by the interuniversity coordinating bodies of the two Communities (the VLIR and the CIUF), has drawn the attention of the public authorities and of socio-economic circles to the alarming amount of time Belgium has lost, in comparison with other EEC and OECD countries at a comparable economic level, with regard to the proportion of national resources, especially public ones, devoted to research and development; according to 1987 estimates, these figures were 1.65 percent and 0.54 percent of the GNP respectively.[16]

Belgium's multi-year plan for the expansion of scientific potential (called the Maystadt Plan, from the name of the then minister of science policy), tabled in 1984, called for a specific budget effort over five years in order to make up for this time lost, in two ways in particular:

- by promoting funding for private-sector research activities through a system of tax incentives; and
- by increasing the volume of public funding for research conducted at the universities.

The implementation of this plan suffered many ups and downs (delays and budget cuts). Overall, taking into account initiatives by successive ministers and by community and regional executives in their respective areas of

jurisdiction, and combined with the multiplication of research contracts funded by the private sector and the EEC, this effort has helped increase considerably over the past few years the means available to support university research; this fact has partly offset (with regard to scientific equipment, for example) the reduction of the basic annual allocations provided for in the regulations accompanying the 1971 law.

Today, research in the universities is supported by a variety of funding sources, summarized as follows:

1. The portion of the basic allocation earmarked by the institutions for this type of activity, currently estimated at approximately 20 percent and used mainly to fund the research portion of the total activity time of full-time teaching staff;
2. The *Fonds national de la recherche scientifique* (National Fund for Scientific Research), and associated funds (for medical research, collective basic research and nuclear research), as well as the *Institut pour l'Encouragement de la recherche en agriculture et dans l'industrie* (Institute for the Promotion of Research in Agriculture and Industry); these specific channels take the form either of mandates or research bursaries, which are made available to the universities and for which the candidates are selected and employed by these funds, or of research agreements signed with the institutions; the budget credits for these funds have been given to the Communities (the *Fonds national de la recherche scientifique* and associated funds) or the Regions (the *Institut pour l'encouragement de la recherche en agriculture et dans l'industrie*, except for funding for the agriculture component, which still falls under national jurisdiction);
3. Some science policy programs, for which the universities define the allocation of credits:
   - the special university research funds, created in 1985 and placed under the jurisdiction of the Communities in 1989: in each Community, the funds are distributed annually among the universities on the basis of the number of Belgian graduates at the master's and doctoral levels, and the universities are then free to allocate this envelope to the research programs of their choice;
   - joint projects: the objective of this program, set up in 1976 and also placed under the jurisdiction of the Communities, is to set up centres of research excellence at or among universities, by means of multi-year funding, on application by the university institution;
   - the program known as *Pôles d'attraction inter-universitaires* (Interuniversity Poles of Attraction Program); the objective of this program, created in 1986 and still under national jurisdiction, is to strengthen, by means of interuniversity cooperation, the research

potential of the universities in a certain number of scientific fields and thus, despite the country's size, to make it possible to reach a critical mass that meets international standards;

4. Oriented research programs, which are the responsibility of the *Services de programmation de politique scientifique*, such as incentive programs in artificial intelligence, life sciences, remote sensing and, as recommended by the *Conseil national de la politique scientifique*, the program of assistance to political decisionmaking, as well as, lastly, the four-year social science research program; this last program has just started and has two components: the creation of points of support for research in ten social fields, on an interuniversity and interdisciplinary basis; and research agreements on selected topics according to their social relevance, for example, the problems of aging, migrants, social inequities and dualization; like the *Pôles d'attraction inter-universitaires* program, these programs still fall under national jurisdiction;
5. The other publicly funded research programs, administered on the initiative of national, community and regional government departments; to give only two recent examples, the *Ministère de la Recherche et des Technologies* (Department of Research and Technologies) of the Walloon Region has just announced a multimaterials mobilization program, the basic research for which will be conducted by that Region's universities; as well, the executive of the Flemish Region has just introduced an environmental program;
6. Lastly, research programs administered under contracts signed with the EEC (considerably expanded over the past several years), as well as with local public bodies and private sector businesses.

In addition, in 1976 the public authorities asked each university institution to set up a scientific council, to be responsible for promoting the coordination of internal initiatives in the field of research. In the current economic situation, with increasing numbers of contracts and researchers whose status is precarious, the development of activities of supply to third parties, and interface with businesses, there is in fact a great danger of the university community's losing control of its research development.

Maintaining a National Scientific Research Policy of International Calibre

In 1980, jurisdiction over science policy had been divided among the nation, the Communities and the Regions on the basis of whether the research was basic or applied; basic research was a national responsibility, while applied research was the responsibility of the Communities and the Regions in their respective areas of jurisdiction.

The law of August 1980 was amended in 1988, because this distinction between basic and applied research was considered too vague to be used as a criterion for the distribution of powers.[17] As noted in the first section, then, the distribution of responsibilities (including research conducted under international or supranational agreements and conventions) among the three levels of government was made based on areas of jurisdiction defined in another context.[18]

During the 1988 discussions, proponents of excluding university education from the jurisdiction for education given to the Communities argued, in particular, the need to maintain as much national coherence in the basic research policy as possible. Before that time, however, most of the national budget envelopes had already been divided between the two major Communities, on the basis of what was referred to as a community formula, before being distributed among the universities.

Caught between the desire to broaden community and regional areas of jurisdiction and the wish to maintain national programs of sufficient scope and retain some possibility of national representation for Belgium abroad, the legislators wanted scientific research to have the fullest possible benefit of cooperative processes established by legislation.

Even more importantly, in the specific field of scientific research and in addition to its own jurisdiction, the national government was granted concurrent jurisdiction with the Communities and Regions in their areas of jurisdiction, under certain conditions. As a result, the national government may take initiatives, create structures and allocate financial resources for scientific research that is either the subject of an international or supranational agreement or has to do with activities that go beyond the interests of a Community or a Region.[19] However, if it wishes to exercise this jurisdiction and before making any decision, the national government must submit a proposal for cooperation to the Communities or Regions.[20]

The two examples given below will illustrate this cooperative process.

The first example deals with the *Pôles d'attraction inter-universitaires* program already mentioned; it has to do with structural funding for basic research in the universities, and would thus fall under community jurisdiction as an accessory educational jurisdiction; in order to justify the exercise of its powers in the context of this program, the national government made the point that the program's objective was to make it possible to reach, on the basis of interuniversity cooperation and at the national level, critical masses for the purpose of research. As a result, a national formula is used to allocate funding among the institutions.

The other example has to do with participation in the global change research program (on climatic changes); given the program's international nature, the national government exercised its powers.

There is a trend for this cooperation, and more generally coordination, among the national, community and regional governments in the field of scientific research to be organized on a permanent basis by means of bodies such as the *Conférence interministérielle de la politique scientifique* (Intergovernmental Conference on Science Policy) and, at the administrative level, the *Commission de coopération fédérale* (Federal Co-operation Commission) and the *Commission de coopération internationale* (International Co-operation Commission).

ACCESS TO EDUCATION AND STUDENT MOBILITY

In comparison with neighbouring countries, thanks to the density of Belgium's network of institutions of higher education (which, some observers claim, is too scattered) and to a relatively liberal admission policy, a high percentage of Belgians pursue higher education. According to the report, already quoted, prepared in the context of the OECD study of Belgium's educational policy, 45 percent of 18-year-olds in the Flemish Community would have had access to higher education in 1988; in the French Community, this percentage is 55 percent.[21]

Admission to short courses of higher education is granted on presentation of the student's superior secondary school certificate, general or technical (12 years of study) or professional (13 years of study). Admission to long or university courses of higher education requires the diploma of aptitude for admission to higher education as well; both these documents are issued by the schools and submitted for approval by the *Ministère de l'Éducation* (Department of Education).

For Belgian citizens, there is usually no other university admission selection procedure, except for studies in civil engineering, for which there is an admission examination. In some nonuniversity institutions of higher education, admission tests are organized when the number of candidates exceeds the institution's capacity.

As a result, selection effectively takes place during the course of study, mainly at the end of the first year (a considerable number of those students having failed at the end of the first year of university then choose nonuniversity education).

This situation has existed for many years and, periodically, the public authorities and the universities debate the need to introduce, not an admission selection procedure, but rather a student guidance test, the purposes of which would be to better match the secondary school education students have acquired and the requirements of the chosen educational track, and to remedy observed shortcomings. There is concern, expressed mainly by the student associations, about setbacks to the policy of democratizing education that has been followed up until now, particularly since students already see increased registration fees

as being contrary to this policy. The main ground for objection expressed by students to the initial version of the draft decree on university education submitted by the Flemish Community had to do with the introduction of such a guidance test.

Another element of the debate on access to university education has to do with the conditions of admission to master's programs applicable to holders of short, long, or nonuniversity diplomas; without going into the details here of the peculiar distinction in the Belgian university system between studies leading to legal degrees and those leading to scientific degrees, this problem of access links between the various levels of higher education will certainly be an important issue in future; it should be dealt with in the context of a higher education development policy.

The public authorities have never intervened to control in a mandatory way the numbers of students in the different educational tracks, either according to sectoral forecasts of labour needs (which are not made in Belgium), or to correct observed imbalances in the labour market. As a result, there has never been a quota policy. Instead, the choice of educational tracks is made by the students according to their preferences, whether or not those preferences are influenced by information on expected job prospects at the end of the programs of study. Thus the evolution that has taken place over the past ten years has been marked by a lessened attractiveness of the medical sciences, literature and some scientific disciplines, mainly made up for by a fascination for studies in management, social communication and, just recently, law. Saturation in the medical professions, measures aimed at controlling increases in health expenditures and streamlining efforts in the field of education, along with unfavourable demographic forecasts of education levels, have all helped change the numbers of students in the different educational tracks. Obviously, these numbers should be considered in relation to the crisis in funding in what is referred to as the noncommercial sector and the fact that the welfare state is being called into question.

Student mobility between the two major Communities has never caused problems, as long as the institution respects the regulations concerning language use. Transfers between institutions of the two Communities, a relatively recent phenomenon, seems to be expanding mainly among students who have already obtained an initial, basic diploma and are seeking to acquire additional or specialized training in a university in the other Community; as well, these transfers are an opportunity to become bilingual, something that is required more and more often in professional circles. Thus far, the problem of responsibility for funding these transfers has never been explicitly discussed. Lastly, it should be noted that for some 20 years, the policy for student bursaries and loans has been part of community jurisdiction and that since 1986, student registration fees have been different in the north and the south of the nation.

The problem of foreign students' access to higher education in Belgium, on the other hand, has been a major concern for several years. The open policy of the 1960s has gradually been made more restrictive, mainly through the criteria that govern whether this category of students is considered in the funding of institutions. As a result, the public authorities have gradually limited the number of nationalities and levels of study for which the universities were eligible for public subsidization, thus obliging the universities to require of these students extra fees equivalent to at least half of the forecast subsidization for Belgian students. In the same way, the public authorities have required nonuniversity institutions of higher education to increase student registration fees quite considerably. However, according to several decisions by the European Court of Justice, requiring students from EEC countries to pay higher registration fees than those required of Belgians contravened EEC regulations (this requirement has since been lifted). Nevertheless, the public authorities have not agreed to include this category of students in the student numbers considered in the funding of institutions.

A FEDERALISM IN THE HEART OF THE EUROPEAN COMMUNITY

In comparison with the experience acquired in other federal systems, Belgian federalism is still in limbo. Depending on their mood, citizens may have the impression that the country, left to centrifugal forces, is coming unravelled or, on the contrary, is headed towards a new balance that is more in harmony with the diversity of the populations for which it is home. It is true that today the Communities and Regions seem to be primarily concerned with delineating their respective territories; however, they are also claiming from the nation a share of the national heritage, an indication of emancipation and of taking charge of their history.

However, this local affirmation is taking place at the very time when Belgium, a small country at the meeting place of Latin and Germanic cultures, feels caught up in the accelerating movement to build the 12-member European Community; this call to wider horizons is far from unique in Belgium's history.

To return to the topic of higher education, in relation to its size, Belgium is the EEC country in which programs, like ERASMUS, are most influential, both for the Belgian student population and for the institutions of higher education that volunteer to accept foreign students. As well, because it is in fact — and may some day be in law — the site of the capital of the European Community, Belgium has the advantage of an influx of foreign individuals and businesses that help diversify and enrich in many ways the activities of its university community: students, teaching staff and researchers. Since the public authorities do not impose on the institutions of higher education any system regulating the quality of their activities, Belgian universities, long accustomed to

criticizing each other, are now getting into the habit of not only comparing themselves with their European counterparts, but also building a dense network of interuniversity and interdepartmental cooperation.[22]

This internationalization of the environment of higher education is not the result of a spontaneous mixing of populations; rather, it forms part of a transfer of sovereignty to supranational institutions. The European Court of Justice ruling preventing the public authorities from requiring students from EEC countries to pay higher registration fees than those required of Belgians has already been mentioned. Another example is the fact that starting in the 1990-91 school year, all short two-year higher education training courses have been extended to three years in both the north and the south of the country, the Flemish and French Communities having agreed to the European Directive of December 1988 on equivalent diplomas.[23] In the field of research, there are more and more examples of participation in European programs. The fact that the universities are located near the administrative management offices of these programs facilitates the circulation of information and often allows for association and even consultation as soon as the programs are established. From a more fundamental and longer term perspective, this new environment cannot fail to affect and indeed challenge certain habits in Belgian society, in particular, its segmentation; it will also inevitably affect the lifestyle and management style of the institutions of higher education.

Is it asking too much to dream that the two forms of federalism, Belgian and European, could cooperate to eliminate old barriers?

NOTES

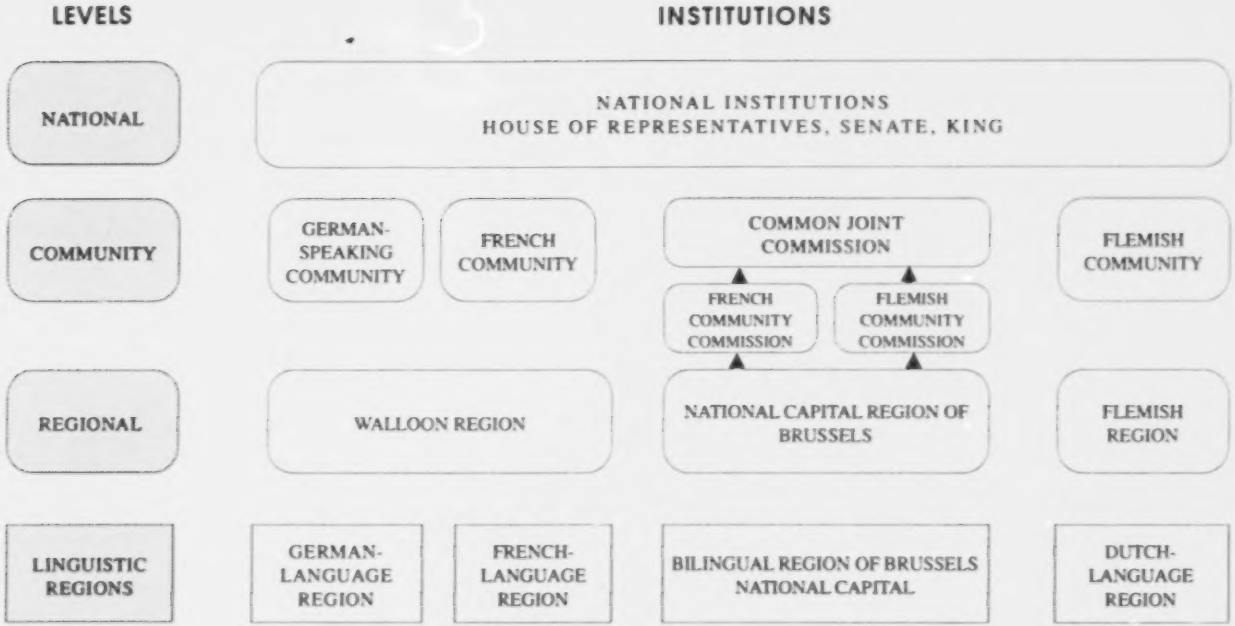
1. The text of this chapter is based, in particular, on two works: Jacques Brassine, *Les nouvelles institutions politiques de la Belgique* [Belgium's New Political Institutions], CRISP, Document no. 30 (1989); and Charles-Étienne Lagasse, *Les institutions politiques de la Belgique et de l'Europe* [The Political Institutions of Belgium and Europe], Éditions CIACO (1990).
2. In the preceding 90-year period, there had been only two constitutional reviews in Belgium; the purpose of each of them had been to broaden the electorate.
3. Before the French Revolution and the subsequent period of annexation, the territory that now constitutes Belgium had consisted of provinces whose existence, for the most part, had been relatively independent.
4. Lagasse, Les institutions politiques de la Belgique, p. 16.
5. Provinces, communes and other local entities which have their own specific institutions will not be discussed here.
6. This third phase of state reform should also address, in particular, reform of the legislative assemblies (the regional and community assemblies would no longer be composed of national elected representatives, and dual mandates would thus be

eliminated), the possible introduction of a constitutional court, and the international powers of the communities and the regions.

7. The nation, or now the community, thus plays a dual role, as: (a) the organizing power for the institutions in its network; and (b) the authority responsible for applying the regulations to subsidized official or free educational institutions.
8. Michel Molitor, "Les non-politiques de l'enseignement supérieur" [The Non-policies of University Education], *La Revue nouvelle* 39, 11 (1983): 363-76.
9. "L'Enseignement supérieur et la recherche scientifique" [Higher Education and Scientific Research] (provisional document), Report by Belgium on its educational policies, prepared for the OECD review, theme 4 (1990).
10. The decree relating to universities in the Flemish Community was voted on 30 May 1991, and came into effect on 1 October 1991.
11. Direction générale de l'enseignement supérieur et de la recherche scientifique [Higher Education and Scientifique Research Directorate], Ministère de l'Éducation, de la Recherche et de la Formation [Department of Higher Education, Research and Training] of the French Community, "L'Enseignement supérieur et la recherche scientifique" [Higher Education and Scientific Research] (1990), p 30.
12. Ignace Hecquet, "Le financement des institutions universitaires en Belgique [Funding of University-level Institutions in Belgium], paper presented at the *Symposi sobre finançament universitari*, Institut d'Estudis Universitaris Josep Trueta, Barcelona (28-29 March 1988).
13. In Belgium, what are referred to as complete universities, that is, those with at least the five traditional faculties (philosophy and literature, law, science, medicine and applied science), are theoretically free to create any new program of study; the lists of diplomas other university institutions are authorized to confer, and thus the programs of study they may organize, are governed by law.
14. This section was written with the collaboration of Dominique Opfergeld, a member of the research and development unit at the Université catholique de Louvain and an official representative in the Office of the Minister of Science Policy.
15. In April 1991, the exchange rate was Bel.Fr.30 to C$1.00.
16. T. Van den Poel, "De belangrijkste wetenschappelijke en technologische indicatoren," *Universiteit en Beleid*, 3, 3 (1989): 9, quoted in the report by Belgium on its education policies (OECD review).
17. Listing of grounds, quoted by Brassine *Les nouvelles institutions*.
18. Section 5 of the law of 8 August 1988 to amend the special law of 8 August 1980 by inserting in it a section 6a.
19. Ibid.
20. Royal decree of 9 April 1990, implementing section 6a, part 3 of the special law on the reform of institutions.
21. These percentages are probably somewhat exaggerated, given the number of students who repeat the first year; with regard to the French Community, and according to recent calculations, approximately one-fifth of young Belgian francophones would have access to a university education today.

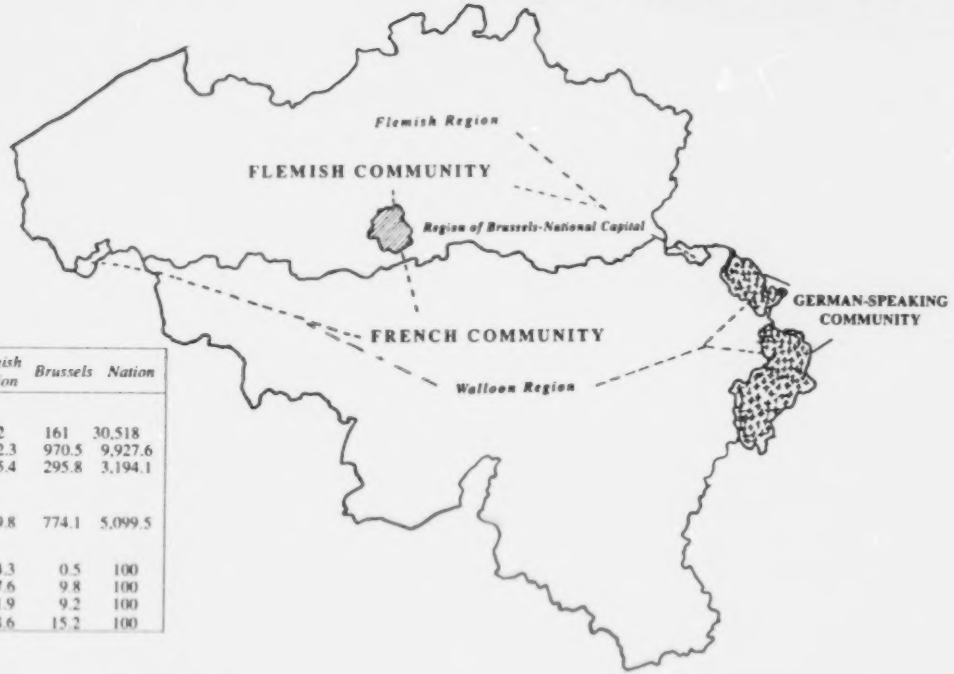
22. This opening up of the Communities outside their boundaries finds constitutional expression in the right to sign treaties, acknowledged in the 1988 review. In theory, the third phase of state reform should grant this power to the Regions.
23. Report by Belgium on its education policies, OECD, 1990.

APPENDIX 1
The Institutions of Belgium



Source: J. Brassine, CRISP, 1989.

APPENDIX 2
Belgium: Communities and Regions



Basic Data on the Regions

	Walloon Region	*Flemish Region*	*Brussels*	*Nation*
Absolute Figures				
Area (km^2)	16,845	13,512	161	30,518
Population (1989) (millions)	3,234.8	5,722.3	970.5	9,927.6
Employment	922.9	1,975.4	295.8	3,194.1
Gross Regional Product (1988) (billions of Belgian francs, at current prices)	1,335.6	2,989.8	774.1	5,099.5
Percentages of National Figures				
Area (km^2)	55.2	44.3	0.5	100
Population (1989)	32.6	57.6	9.8	100
Employment	28.9	61.9	9.2	100
Gross Regional Product (1988)	26.2	58.6	15.2	100

Sources: INS, ONSS and INAMI, March 1991.

Source: J. Brassine, CRISP, 1989.

APPENDIX 3
Higher Education in Belgium

UNIVERSITY LEVEL	STATUS	STUDENTS 89-90
1. Flemish Community		
Complete universities		
Rijskuniversiteit te Gent	Community	12,935
Katholieke Universiteit te Leuven	private, Catholic	23,549
Vrije Universiteit Brussel	private, free-examinist	7,411
Other institutions		
Rijkuniversitair Centrum te Antwerpen	Community	1,945
Universitaire Instelling Antwerpen	public	2,006
Universitair Centrum Limburg	public	757
Universitaire Faculteiten St Ignatius te Antwerpen	private, Catholic	3,656
Universitaire Faculteiten St Aloysius te Brussel	private, Catholic	910
Sub-total		53,169
2. French Community		
Complete universities		
Université de Liège	Community	10,424
Université catholique de Louvain	private, Catholic	17,241
Université libre de Bruxelles	private, free-examinist	15,668
Other institutions		
Université de Mons-Hainaut	Community	2,212
Faculté polytechnique de Mons	Hainaut province	1,000
Faculté des sciences agronomiques, Gembloux	Community	900
Facultés universitaires Notre-Dame de la Paix, Namur	private, Catholic	4,187
Faculté universitaire catholique de Mons	private, Catholic	1,401
Facultés universitaires Saint-Louis, Bruxelles	private, Catholic	1,208
Fondation universitaire luxembourgeoise	interuniversity	
Sub-total		54,241
3. Bilingual		
École militaire royale	national	926
Faculté de théologie protestante	private	144
Sub-total — Universities		108,480
POST-SECONDARY NONUNIVERSITY LEVEL		
French and German-speaking Communities		44,520
Flemish Community		81,807
Sub-total — Post-secondary nonuniversity		126,327
Grand Total — Higher Education		**234,807**

Sources: *Bureau de statistiques universitaires* [Bureau of University Statistics] *Fondation universitaire* [University foundation]: Annual Report 1989-90; report by Belgium on its education policies (OECD review).

Higher Education in Federal Systems: The European Community

Pierre Cazalis

INTRODUCTION[1]

The European Community is not a federal state — not yet at any rate. Through the Treaty of Rome (1957), the original six member states (Germany, Belgium, France, Italy, Luxembourg, the Netherlands) first became a "Common Market": the Treaty eliminated barriers to free circulation of goods, services, persons and capital; it also eliminated tariffs and quotas among the six countries, initiated common external customs regulations, and made decisions on the implementation of various common policies. Its principal aims and means were thus economic, although several of its founders may have had political motives.

Through the *Single European Act* of 1986, the 12 member states[2] began to work towards the single market, more precisely towards total economic union, which, in addition to the free circulation of goods, services and people, aims at harmonization of monetary and social policies, of all economic legislation, of fiscal policy and so on. Beyond total economic integration, the Community of Twelve has significant political plans: its major leaders see it as bringing together, in the future, the whole of Europe, in the framework of a judicial-political structure still to be defined.

It is from these two perspectives — economic and political — that it is now seen as necessary to begin making systematic efforts to achieve harmonization of conditions for obtaining diplomas, continuing cooperation in research and training of highly-skilled scientific workers, development of a European culture within the student cohort now attending university and so on, if not the beginning of a process of real integration of higher education within the 12 member states.

Let us first look at the economic perspective. Like Japan, for example, and more so than the United States, Canada or Australia, which have many natural

resources, the 12 member states know that economic prosperity, and therefore political stability, will henceforth depend — and this has been true for at least two decades — on the quality of their countries' human resources, their creativity, their sense of innovation and their ability to assimilate new technologies. These are all qualities developed by an excellent educational system, especially at the higher education level. As the O'Callaghan document stresses, the economic competitiveness of the European Community largely depends on the performance of the higher education systems in the 12 member states — all the more since the Court of Justice, with several recent judgements, has clearly established that "higher education can form part of the notion of vocational training, making it subject to the provisions of the Treaty and of the Single European Act in respect of vocational training."[3]

Second, let us look at the political perspective. The hypothesis of the political integration of Europe calls, at the very least, for a corollary hypothesis of harmonization of the major public services in the 12 member states, educational systems being prominent among them. Such harmonization is more than a convenience for management purposes; it is actually a qualitative requirement, since certain national systems only partially meet the needs of the countries concerned, both in regard to the intrinsic quality of the general education provided as well as the qualitative and quantitative equivalency, for example, between vocational training and the job market, between ethical training and social development, between cultural training and affirmation of the European identity.

This is why some of the builders of Europe affirm the need for better complementarity of education systems in general and higher education in particular. An influential minority even see the necessity for pure and simple integration of the 12 systems.

If they are not officially working on such an integration as of now, it is apparent that the leaders of the European Community and numerous universities, through the harmonization of approaches and cooperation, are, in effect, working to bring about the conditions needed for integration. Before presenting the programs that make up the foundations of "the Europe of Higher Education," this chapter addresses the context for higher education in facing the challenge of 1992 and contributing to the building of Europe.

CONSTRUCTING HIGHER EDUCATION IN THE COMMUNITY OF TWELVE: THE GENERAL CONTEXT

The officials of the European Community, as well as many leading figures in education and politics in the member countries, are truly working towards constructing a Europe-wide system of higher education. To paraphrase the O'Callaghan document, their efforts fall essentially into four facets: the

political context of the Community of Twelve; the socio-demographic context; the socio-economic context; and of course the educational context. The first three of these are addressed here, the fourth in the next section of this chapter.

Political Context

Three main trends should be stressed in this regard.

First, there is the increasing integration of countries in the Community, an integration which, as noted above, is increasingly political, given that the advent of the single market, on 1 January 1993, will, in principle, mark the completion of economic integration. In fact, even though implementation of accompanying policies will continue for many years, doubtless until the year 2000, before Europe is a true economic entity, one can state that, henceforth, the finishing touches on the European economic edifice cannot be made until conditions of an essentially political nature are brought about. Consequently, as the major political leaders in Europe affirm, the problem of building a political Europe must now be faced.

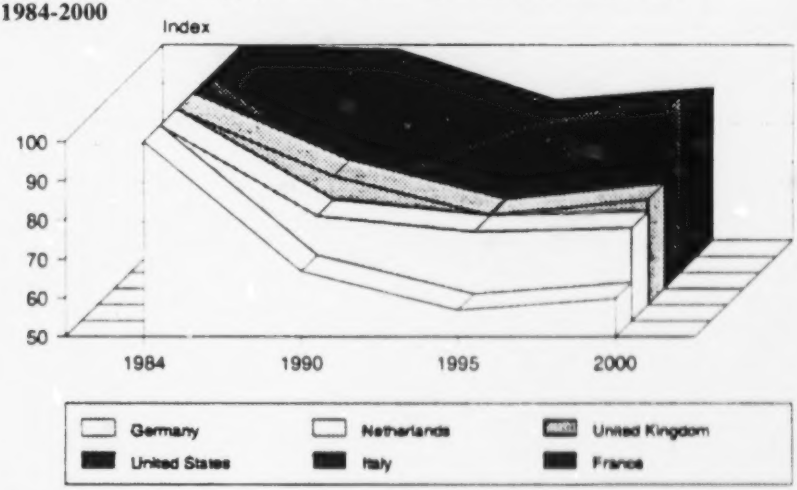
Second, are the rapid political changes in Eastern and Central Europe, which impose on the 12 member states new economic, political, cultural and moral constraints that make imperative the completion of the European economic edifice, the strengthening of the power of intervention by member states in regard to aid to Eastern and Central Europe, and, thus, an increase in the efficiency of outputs throughout the European Economic Community.

Third, there is the will to make Europe's presence more strongly felt in the world, which has the same requirements — acceleration of the processes of integration of all European sub-systems, including educational sub-systems.

Socio-demographic Context

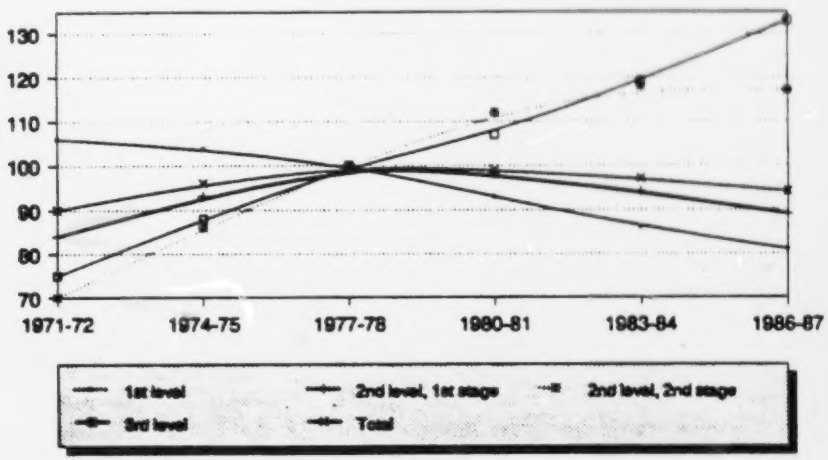
There are two aspects to this subject, as shown in Figures 1 and 2. On the one hand, the total number of students at the pre-university level has been dropping substantially, since 1971-72 in the case of elementary level, since the late 1970s and early 1980s in the case of the first stage of the secondary school level (that is, up to the tenth year of schooling generally speaking), and since 1984-85 for the second stage of the secondary school level (generally, from the eleventh to the thirteenth year of schooling). Thus the pool of regular pre-university students, from which the university draws, is slowly declining. On the other hand, the university population, referred to as the third level, continues to grow regularly; official figures for 1988 to 1990 confirm the trend shown in Figure 2 for the past decade.

Figure 1: Indexed Supply of 15-19 Year Olds in Europe and USA, 1984-2000



Source: IMS/EUROSTAT/UNESCO.

Figure 2: Numbers of Pupils and Students by Level of Education (EUR 12)



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In principle, the drop in pre-university age students should have affected already the number of university enrolments. Although the complement of 15-19 year olds is apt to decrease until 1995 at least, as shown in Figure 1, this decline has not yet manifested itself at the higher education level. There are several reasons for this, among them the increasing number of students going on to university after graduating from secondary school, and the trend towards increased retention rates at the post-secondary level among the graduates of secondary school (see Figure 3); similarly, the growth of adult education — not widespread in Europe — will exert pressure on increased enrolments at the university, or third, level (see Table 1).

The effects of these various phenomena mean that post-secondary education maintains a strong potential for growth, at least if one considers the United States, and even Canada, as reference points (see Figure 4 and Table 1).

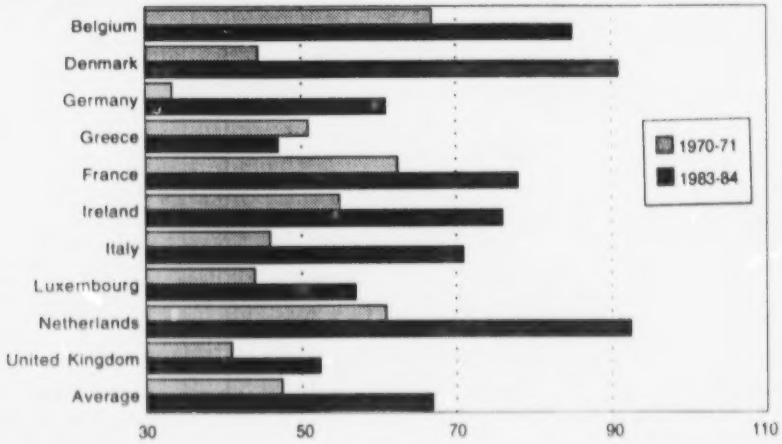
Table 1: Number Qualifying Per Thousand Persons in the Corresponding Age Group in 1986

Country	*LEVEL 5*	*LEVEL 6*	*LEVEL 7*	*Definitions*
Belgium	158	149	inc. in. L6	*Level 5*
Denmark	103	127	inc. in. L6	Short Course,
Germany[a]	77	124	15	Sub-degree level
Greece	49	109	4	
Spain	1	147	5	*Level 6*
France	147	153	62	Long course
Ireland[b]	10	108	52	First degree level
Italy	4	79	14	Admittance to L7
Netherlands	165	68	inc. in. L6	
U.K.	123	142	46	*Level 7*
U.S.A.	127	241	97	Postgraduate
Japan	111	219	15	

[a]1985 [b]1985 — Universities and equivalent institutions only.

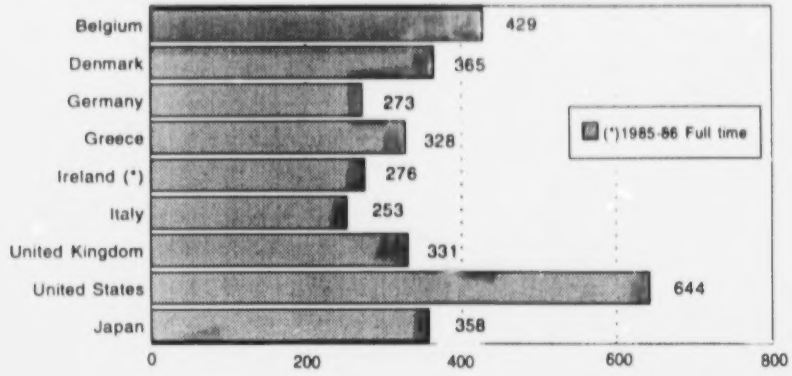
Source: O.E.C.D.

Figure 3: Staying-on Rates in Full-time Education for 16 Year olds in Some Member States of the EC



Source: IMS/EUROSTAT.

Figure 4: New Entrants, per 1,000 Persons in Corresponding Age Group in 1986-87



Source: O.E.C.D.

Socio-economic Context

With regard to higher education, the economic context is characterized by two facts: the growth of the job market for graduates of higher education and the financial problems of these establishments.

Whatever is said, unemployment among those completing higher education is much lower than among non-graduates, even if the graduates do not always find a suitable job in their field of study. The major factor is the *significant and ongoing growth of the job market for jobs requiring a higher level of training*; this phenomenon is mainly due to technological innovation. Over the past decades, the number of jobs in the tertiary sector has increased, principally in management, sales, engineering and communications. Overall, if the participation rate remains fairly constant, based on figures for 1985, in the year 2000 Europe will have a shortfall in the order of 300,000 specialists coming out of higher educational institutions. This would affect most of the countries in the Community, except Greece, Spain and Portugal.

This means that *Europe* must count on a significant increase in the number of young people going on to higher education and an increase in the numbers of those who complete their training, in order to have highly skilled workers. Failing this, Europe must also count on development of new technology, increased productivity, possible employment of older workers by rolling back the retirement age, increased participation by women in the highly specialized job market, and if absolutely necessary, setting up enterprises outside Europe to meet the needs of the 12 member states. There are also significant openings in the leading industries and public services, in which jobs related to the environment, health and social services are multiplying.

The financial restraints with which higher education institutions must live have affected not only Europe but also institutions in industrialized and developing countries. These restraints have been generally severe, dating from the economic recession of 1982-83, and were felt all the more sharply because of the high growth in student numbers and a marked increase in the number and cost of equipment for teaching and research.

Throughout the 1980s, higher education was in competition for public funds with other sectors, such as health, social services, public amenities and so on. Moreover, there is no evidence that the savings effected in the area of pre-university education, due to lower numbers of students, could be transferred to higher education. If this were to be done, it is not certain that they would be sufficient. Hence, severe financial restrictions will in all likelihood continue to affect all higher education institutions throughout the decade of the 1990s.

This leads to the question of alternative sources of revenue. Europeans do not think that the private sector will be a significant partner in this regard in the system overall; at the most, it may be possible to draw upon this sector for

support targeted towards specific purposes such as adult training and certain applied research. It also seems that a significant increase in tuition fees must not be counted on. These are nil in some countries, nominal in others and are relatively significant in still others. Relative equalization of fees would present short-term political difficulties in some countries; as well it should not be expected that increased financial contributions from students would be a real solution to the financial problems of higher education institutions.

CONSTRUCTING HIGHER EDUCATION IN THE COMMUNITY OF TWELVE: THE EDUCATIONAL CONTEXT

Multiplicity of Systems

There is no need for lengthy discussion on the subject — it is quite simple: the Community of Twelve is also a Europe with 12 very different systems of higher education. This means that there is no one system for planning or management, no homogeneous structures for organizing studies, no uniform policy concerning access to higher education, and no global model for funding the institutions and the students.

Therefore, according to the O'Callaghan report, one of the most imperative tasks in Europe is the construction of an authentic system of post-secondary education that would lead to greater coherence of missions, structures, standards and regulations, pedagogical techniques, resources and strategies for competition, and, at the same time, to facilitate mobility of students and staff between institutions; it would serve as a springboard for mobility of citizens in the European Community. The need for a Community-wide system is actually part of a broader need for a similar system in each of the member states, since they are far from being coherent. More precisely, the educational context of higher education is characterized by a number of traits:

- the obsolete character of its content;
- the lack of coherence of its structures;
- dispersed research;
- inequality of conditions for access to higher education;
- inadequate intra-European exchanges;
- varying quality and lack of systems of evaluation;
- insufficient training for university staff;
- too little autonomy in the institutions and lack of management strategy.

The obsolete character of its content refers mainly to the lack of development of active teaching methods and the weakness of training for instructors. These

two characteristics are also very interdependent. According to the O'Callaghan report, European higher education will not be able to play its role as an instrument of change within a Europe that is itself undergoing great changes, except to the extent that a new balance is achieved between general training and methodological training on the one hand, and specialization and development of professional competencies on the other. North America, we know, has a similar problem. As well, increasing interdisciplinary options; the increasing importance of social sciences in training programs, including fields referred to as scientific or technical; the growth in language learning; and better training in technology and the analysis of its impact should be at the core of any revision of the content of training.

It was mentioned above that the 12 member states have at least 12 systems of higher education. The O'Callaghan report suggests that there are in fact more than 12, since certain countries have not yet integrated all of their post-secondary educational institutions into one system, in the scientific sense of the term. In some countries, certainly, disciplinary and sectoral integration has been carried out; and basic and vocational training programs exist in the same institution. This is the case in Spain, Belgium and Italy where faculties for law and the arts exist in the same establishment alongside the engineering and architecture schools. In other countries, such as France, a system of professional training in the "Grandes écoles" coexists with a university system as such. Still others, such as Germany, not only distinguish the levels of training within the university, but even at the level of the institution, the universities being at the top of the hierarchical pyramid. Although increasingly integrated into universities, training of secondary teachers is done in various ways. As well, there are — virtually everywhere — specific institutions answering to ministries other than the ministry of education or higher education. On the other hand, sometimes the differences between institutions or networks of establishments are blurred, as has been happening in the United Kingdom for the last two years.

The organization of studies is itself highly variable: age of entry to university is not the same everywhere — varying from 17 to 19 years old — and the proportion of students according to level of studies varies greatly as shown in Table 1; certain countries prefer the short course, others the degree level. The greatest differences are doubtless in the structure of the undergraduate level: it is three years in the United Kingdom, three or four years in Ireland, four years in Scotland, Germany, the Netherlands, France, Belgium and Portugal, four or five years in Italy, and five or six years in Denmark and Spain — although Denmark has recently agreed to award bachelor's degrees after three years.

It is understandable that this great degree of heterogeneity of structures poses problems with regard to the recognition of diplomas, and thus of the mobility of students, as well as causing a great deal of confusion for employers. This is

why a general directive from the EC Council now calls for a minimum of three years of study for vocational training at the higher level.

Research Dispersion

Research is doubly dispersed — among establishments and among countries. The multiplicity of institutions explains this phenomenon in part, and the different national traditions with regard to research generally contribute to increasing it. However, there are changes in this area, with the advent of organizations responsible for setting directions for national research policies. This attempt at national cohesion is long-standing in some cases — France, for example — and much more recent in others, such as Spain. One of the purposes of such organizations is to remedy dispersion when there is a risk not only of compromising the quality of the research, but even of its not being carried out. This is the case for the major programs of basic research on high energy, new materials, the genetic code, space, and so forth.

Access and Mobility

Access to higher education in certain European countries is said to be "free" or "open," and their constitutions guarantee this access. In others, attempts to balance supply and demand have produced various results. Sometimes the procedures for awarding places in higher education institutions are handled by a central agency, and sometimes they are managed by the institutions themselves. Access to higher education may also be affected by funding factors and regulated by competitions or tests of various kinds. As to funding, we have already seen that policies concerning tuition fees vary greatly from country to country: in some there are no fees, in some they are nominal, while in others they are quite high. The same is true for student aid: sometimes all costs for living and studies are covered, sometimes only a small fraction is covered; it is sometimes awarded in the form of a grant, sometimes as a loan only and sometimes in a combination of the two.

Access to university and student mobility are often jeopardized these days by the the universities' overall lack of resources and by the resulting increase in the setting of quotes. It happens with increasing frequency that being streamed into a sector he or she does not want leads to lack of interest on the part of the student, who then abandons his or her studies.

Overall, there is little intra-European mobility among students, owing to a lack of information (because of the language difficulties inherent in such mobility) and the lack of a tradition of studying in another country — there are presently more French students enrolled at American universities than in any Community country.

We will see below that the European Community and its Commission are today making great efforts to set up specific programs to promote enrolment of students in other Community countries. Policies concerning access to higher education are mainly set in each country, using different methods: increasing the number of grants, allocation of educational vouchers, guaranteed bank loans, and so on.

Quality and Evaluation

Employers, students and suppliers of funds feel strongly that there is a need to reevaluate the quality of higher education. Leaders know that in order to do this, it is necessary to clarify the goals of higher education and of each of the institutions; increase the implementation of performance indicators; and systematize control and evaluation procedures.

Of course a major constraint in this respect is the autonomous status of most institutions. Insofar as quality and evaluation go hand in hand with real autonomy, individuals and institutions will be accountable, and have the freedom to implement reforms in programs and teaching methods.

The European university tradition is such that change takes place rather slowly. There are several conflicting ideas concerning a model for evaluation. Some prefer the "market" model, that is, evaluation based on free choice of the university by the student, the graduate by the employer, the opinions of the public and the media, and freedom of career moves by teaching staff from one institution to another. Others prefer to rely on evaluation committees, but it is a rare case when they agree to have foreign experts on these committees. Still others have chosen self-evaluation, with the advice of external evaluators, who participate a *posteriori* in the evaluation process.

Strategic management of systems and institutions has not, on the whole, made inroads in European higher education, so that evaluation, when it is done, is done without reference to explicit learning objectives for individuals, or to pertinent pedagogical, ethical or socio-economic objectives, in the case of institutions.

Development of Human Resources in the Institutions

The O'Callaghan report stresses that the financial restraints of recent years have led to a marked deterioration in human resources in higher education institutions. The "good" professors sometimes leave, often not to be replaced because of lack of recruitment, and the teaching body as a whole has become older.

On a broader scale, a policy for training of staff and for development of human resources is imperative. There are several ways this could be done: reevaluation of salaries — particularly for teachers and researchers — greater

mobility between the university and the private sector, setting up of "discretionary" funds for grants to the best teachers and researchers, development of systematic training programs for young teachers, more frequent use of personnel from the private sector, retraining of existing personnel, making a widespread practice of evaluation and career planning, and so forth.

Autonomy and Strategic Management

In most of the 12 member states, despite certain limitations, the institutions now have enough autonomy to begin to practise strategic management, which is generally not done at present. This kind of management is based on development of an "institutional" strategy which brings out the unique identity of each institution. To do this, fundamental choices must be made concerning the institution's general orientation — the balance between teaching and research, for example — with regard to sectoral priorities, the preferred pedagogical model, the most desirable structures, the relationships to be maintained with the surrounding milieu and so on.

To these ends, strategic planning is the key element in any process of change, since it allows the strengths, weaknesses and potential of the establishment to be identified. Strategic planning is based on leadership, insightfulness, communication and evaluation. These qualities require that university leaders carry out their duties in a context of broad autonomy, the latter affecting, as we have just seen, strategic planning and the implementation of the decisions to which this planning leads.

However, higher education institutions suffer from the lack of management training among their leaders, and thus their lack of knowledge of the principles and methods of strategic planning. Systematizing their training is thus one of the conditions for better management of higher education.

POLICIES AND PROGRAMS OF THE EUROPEAN COMMUNITY

It bears repeating that the 12 member states are not properly speaking a federal system, and they comprise as many higher education systems as there are countries. While it does not yet have all the tools for legal or administrative intervention for progressive harmonization, even integration, of the 12 systems, the Community has at least taken significant actions in this regard. The main ones are described in this section.

It must first be noted that the concern for common action with regard to higher education goes back to 1969, with the adoption of *Communiqué VII* from The Hague, dealing with cooperation on higher education; a resolution bearing on this same subject was adopted by the ministers of education on 16 November 1971, and a program for action was set up through a decision of 9 February

1976. Until now, the Community's actions have come up against a legal problem: the ambiguous distinction between "education" and "training," the latter being understood in the sense of vocational training. "Training" normally falls into the area of possible intervention by the Community, to the extent that it is oriented towards economic development. However, "education," with broader and less clear goals, was considered as being exclusively the purview of the member states. The Court of Justice closed the debate with several major judgements in 1985, 1988 and 1989, confirming that higher education is part of the field of vocational training, making it subject to the provisions of the Treaty of Rome and the *Single European Act* in respect of vocational training. That was roughly when the importance of education in the building of Europe was recognized, particularly in the area of economic integration, and when the door to a certain number of formal interventions was opened. The following ten programs summarize the EC's interventions to date.

COMETT

COMETT is a Community action program for technological education and training. It was established by Community Council decisions of July 1986 and December 1988 and has a budget of ECU 200 million. There was also a plan to extend the program, in part at least, to European Free Trade Association (EFTA) countries.

COMETT consists of a network of university and private sector training partnerships. Its goals are:

- funding of exchange students and personnel between higher education institutions and private sector;
- development and funding of continuing education;
- development of multi-media training systems;
- development of information and evaluation measures; and
- establishment of cross-border and regional sectoral networks for training of personnel and technology transfer for small and medium-sized businesses.

In 1987-88, 125 projects (out of 539 applications) led to 4,000 individual training periods, involving 700 higher education institutions (out of a total of about 3,500 in the Community), 1,600 businesses and 800 other public organizations. COMETT provides these projects with up to 40 percent of their costs.

It is considered that the program has already been of benefit with regard to mobility of personnel, to the establishment of solid bases for cooperation between universities and the private sector, to meeting the needs of the latter

with training programs, and to the development of methods to combine studies and vocational training in the private sector.

ERASMUS

ERASMUS is the European Community Action Scheme for the Mobility of University Students. It was established by Council Decision on 15 June 1987. On 14 December 1989, the Council approved the second phase of the program for the period 1990-94 and awarded it a budget of ECU 192 million for three years. The possibility of participation by EFTA countries was also suggested.

ERASMUS has three main goals:

- to increase the number of students from higher education institutions spending a period of integrated studies in another member state;
- to produce graduates who are more European in outlook; and
- to promote a high degree of broad cooperation among higher education institutions in the member countries while ensuring mobility of teaching staff, securing improvement in the quality of higher education and post-secondary training and stimulating the Community's competitiveness in the world market.

The program has four lines of action:

- *Action 1* — The Interuniversity Cooperation Program (ICP) intended to promote mobility of students and staff and to develop intensive programs and curricula;
- *Action 2* is a student "Mobility Grants" scheme to cover additional costs incurred in an integrated period of study abroad;
- *Action 3* deals with academic recognition of diplomas and periods of study in the form of European Community Course Credit Transfers (ECTS); pilot projects in this scheme cover history, business administration, medicine, chemistry and mechanical engineering; a total of 81 institutions and three consortia are involved, the goal being to develop ways to provide automatic recognition of credits;
- *Action 4* concerns "a series of complementary measures."

A first assessment of ERASMUS was made in 1989-90. ERASMUS now has 1,500 Interuniversity Cooperation Programs involving 1,000 institutions and 5,000 faculty members. Mobility grants were made available to 28,000 students, but only 2,200 made use of them. The long-term objective is to open the program to approximately 10 percent of the students in the Community.

Overall, it is considered that the ERASMUS scheme has had a great impact on the European university scene. It has contributed to an increase in

cooperation, brought about substantial changes to regulations for national grants systems, a broadening of programs of study and very useful comparisons, as well as some critical judgements on the structures, programs and policies of higher education. As to the students, it is felt that they are very satisfied.

LINGUA

The LINGUA program was adopted by the Council on 28 July 1989 to "promote foreign language competence in the European Community." Its budget is ECU 200 million. The program provides for periods of study and training for teachers of foreign languages, as well as for training periods for students, in particular for future teachers. The program also is intended to develop language skills among workers at all levels and to promote innovative methods of foreign language teaching. The program began operation only a short time ago and thus has not been evaluated.

FORCE

FORCE is a Community Action Programme for the Development of Continuing Vocational Training, adopted by Council on 29 May 1990, with a budget of ECU 24 million for a two-year period beginning in January 1991. It has two goals:

- to encourage greater investment in continuing vocational training both on the part of the private sector and by public organizations; and
- to support innovation in management training, especially in the less advanced areas of the Community.

The program, having just gotten under way, cannot yet be evaluated.

TEMPUS

Available in principle to all 24 countries in the European Economic Space, since 1990-91, the TEMPUS program was designed specifically to enable Central and Eastern European countries to participate in education programs similar to those existing in the European Community. ECU 107 million has been allocated for the 1990-92 period. The program concentrates on six priority sectors: management and business administration; applied economics; science and technology; modern European languages; agriculture and agri-business; and environmental protection.

It has three broad categories of action:

- joint European projects;

- mobility grants for teachers, students and administrators in higher education; and
- specific grants for complementary activities such as surveys, publications, youth exchanges, and so on.

The program started off rather slowly because of the particular situation in the Central and Eastern European countries and cannot yet be evaluated.

Mutual Recognition of Diplomas for Professional Purposes

This is one of the Community's most fundamental intervention programs. The organization of studies and the diversity of conditions for earning diplomas is such that it greatly hinders cross-border mobility of students.

The Treaty of Rome contains articles to abolish all job discrimination on the basis of nationality and to provide for free circulation of workers. The *Single European Act* of 1986 provided for the establishment of a single market by the end of 1992.

Before 1986, a certain number of sectoral directives had been drawn up. They dealt with harmonization of qualifications and recognition of diplomas and were concerned with a small number of professions: medical and paramedical, lawyers and architects. In 1988, the Council decided to set up, for 1991, a general system for recognition of diplomas in courses of higher education comprising more than three years of study for training as teachers, engineers, lawyers, opticians, accountants and surveyors. The system should ultimately extend to other kinds of training. It is based in principle on mutual confidence and an assumed comparability of levels of education and diplomas, from one country to another. In concrete terms, this means that, in principle, the training of a Greek or English doctor is considered to be equal to that of a German or French doctor, for example.

Normally, such a system of recognition would favour mobility of members of the liberal professions. In fact, this is still extremely limited, for reasons of language, job market, or organizational culture. Much is expected, therefore, of the present efforts and of the program.

Framework Programs in the Field of Research and Technological Development

Within the framework of the EURATOM and the ECSC Treaties, the European Community was provided at an early stage with the necessary research tools, but these were limited to the nuclear energy sector and the coal and steel industries.

The *Single European Act* incorporated a reformulated Title VI into the Treaty, which has allowed for increased Community activities in research, and particularly the development of the 1990-94 framework program adopted by Council in April 1990 with a budget of ECU 5,900 million. This framework program normally funds 50 percent of the cost of projects, which are generally cooperative ventures.

Each program has some component of training and human resource development component. The 1990-94 program has ECU 518 million allocated to all training components, the purpose being to develop human capital and the mobility of specialists, both through individual training and by setting up cooperative networks for what is called pre-competitive research. The goal is to involve ultimately 5,000 researchers. In 1990, for example, 400 institutes of higher education received grants of ECU 42.5 million for training and human resource development alone.

The 1990-94 framework program comprises six programs divided into three broad categories: enabling technologies, management of natural resources and management of intellectual resources. In the first group, two major programs have been developed dealing with information and communication technologies and industrial and materials technologies. The natural resources management program is divided into three sub-programs: environment, life sciences and technologies and energy.

Because it has only recently been established, the 1990-94 framework program cannot yet be evaluated. The EURATOM experiment, however, leads us to believe that concentrating Community efforts on a limited number of research programs could have a decisive effect on the development of research in the Community, and will also stimulate certain industrial sectors.

DELTA

This program, which is still being developed, deals with the application of technological progress in communications and information for purposes of distance learning. Sixty higher education establishments are in principle involved in this program.

Structural Policies and Vocational Training (STRIDE)

The Treaty of Rome gave the European Community the responsibility for working out and implementing a common policy on vocational training. However, we have seen that, until the previously mentioned judgements by the Court of Justice, higher education was not considered as coming within the scope of vocational training policy. Now that this legal-political encumbrance has been

removed, the Structural Funds of the Community can be used for universities, vocational training and regional economic development.

The STRIDE program is aimed at generating research and development potential in certain regions of the Community. The program can be used specifically to meet one of the goals of structural policies and of vocational training: promotion, development and adaptation of relatively disadvantaged regions in the Community where per capita GDP is less than 75 percent of the Community average. The STRIDE program is still being worked out and its content will be defined only over the coming months; it is not possible to predict its potential at this time.

The Jean Monnet Project

Named for one of the fathers of the Treaty of Rome, the Jean Monnet project aims to "assist higher education institutions in developing specialised teaching and research in the area of European integration." It concentrates on the disciplines of law, economics, social and political sciences and history.

This project started in 1990 and has a budget of ECU 1 million which will be used for various actions:

- creation of "European Chairs";
- organizing short permanent courses of study on European integration;
- organizing "European Modules"; and
- increasing the research capacity of the institutions in the field of European integration.

In 1990, 46 applications for chairs were granted out of a total of 200; 148 out of 600 applications for projects involving the preparation of course modules were accepted and 26 research programs out of 300 requested were accepted.

CONCLUSION

It bears noting again that the European Community is neither a federal state nor an integrated system of higher education. But it must also be said that following the adoption of the *Single European Act* and the judgements of the Court of Justice, higher education is now considered to be a tool for economic development and, more globally, for European integration.

The description of the programs that are now in operation and the large sums devoted to them, particularly in the area of research, leads one to think that the European Community is quite aware that the dispersal and the heterogeneity of the organization of its higher education was going counter to current efforts towards economic and political integration. All of the programs will inevitably

contribute, in the medium term, to harmonization of the 12 systems, even, eventually, to kinds of integration as yet undetermined. In 1991, however, a single European system of higher education is still for many a long-term project than a reality.

NOTES

1. This chapter was written with the help of a background paper prepared by Dr. D.F. O'Callaghan, in collaboration with an advisory group of nine experts, for the conference organized in Siena from 5 to 7 November 1990, by the Commission of the European Communities and the Italian Ministry of Universities and Scientific and Technological Research. See *Higher Education in the European Community: The Challenges of 1992*, Brussels, November 1990, p. IX + 84 p. The advisory group members are listed in the Appendix.

   While the European Community is not legally a "federal state," this chapter attempts to respect organization recommended to the authors of the other chapters dealing with the six federal or quasi-federal states studied in this volume — Germany, Australia, Belgium, Canada, the United States and Switzerland.

   The graphs and tables are taken from the O'Callaghan document.
2. The six founding countries were joined by Denmark, Ireland and the United Kingdom in 1971, Greece in 1981, Portugal and Spain in 1986.
3. In this regard see, for example, the Blaizot (February 1988) or ERASMUS (May 1989) judgements.

APPENDIX
Members of the Expert Advisory Group

P. TABATONI	Chairman, Former Rector of the Academy and Chancellor of the Universities of Paris, Chairman of the Council of the European Institute of Education and Social Policy, Paris
G. AUGUSTE	University of Rome
P. BELLEVAL	President, SATURN
L. BERLINGUER	Rector, University of Siena
L. CERYCH	Director, European Institute of Education and Social Policy, Paris
L. LENER	Ministry of the University and of Scientific and Technological Research, Rome
G. LOCKWOOD	Registrar and Secretary, University of Sussex
N. MERRITT	Director, Ealing College of Higher Education, London
H. SEIDEL	President, University of Hanover

The advisory group also benefited from the advice of Mrs. A. HERMANS, Member of the European Parliament's Committee on *Youth, Culture, Education, Media and Sport* and rapporteur of its report on "The European dimension at the university level, with particular reference to teacher and student mobility."

Discussion

An Australian academic, Grant Harman, noted the American emphasis on multiple actors outlined in Martin Trow's paper, and discussed the Australian perspective on this with respect to the funding of universities. Australia has gone through three different phases of funding arrangements. The first arrangement was essentially state funding with some federal supplementation, the second stage was characterized by matching grants from federal and state governments and finally, the current system consists basically of full federal funding. The change to total federal funding has caused a shift in the attitude and perceptions of academics and the leaders of institutions. It was once espoused that more federal involvement was preferable as the federal government was capable of greater financial assistance. However, now that full federal funding exists, many academics feel that a partnership between federal and state governments would be preferable in terms of funding, as one level of government could be played off against the other. It may also be more desirable with respect to autonomy and other considerations.

A German academic, Ulrich Teichler, agreed with the need for multiple actors and the importance of a well integrated process of balanced negotiation. The need for an interplay between actors on all issues was stressed, whether for funding or other issues. This is preferable to having one actor control one aspect and another actor something else, leading to segmented influences in the area of higher education. In principal, more negotiation is always preferable, however in Germany there is already such a complex setting for negotiation that it can hinder progress. From the institutions' point of view, autonomy is also important; if there are more actors in the negotiation process for any given issue, the universities are more likely to play a stronger role.

The discussion then moved to concerns felt by the European Community and its member states regarding the impacts of integration on higher education. Denis O'Callaghan, from the Commission of the European Communities (EC), discussed some of the issues being addressed by the EC. He spoke of a growing

interest and cooperation in promoting education and cultural exchanges in the move towards integration. Mobility has surfaced as a key issue, as has the importance of portability and the universal recognition of academic credentials from one country to another. However, these are not to be accomplished through blanket uniformity, as the EC recognizes the importance of diversity to solving problems. O'Callaghan delineated five principle areas of interest in higher education to be acted on by the EC. These include: increasing participation rates, bringing universities into an industrialized partnership with the economy, increasing emphasis on higher education and updating and upgrading skills, concerted action in developing long distance educations and promoting a series of actions to build up the EC role in higher education.

The EC has sought to facilitate some of these goals in a number of different ways, such as by providing for points of interaction through programs like "ERASMUS." The Community also has a policy to help regions or less well-off member states to come up to the standards of more advantaged member states and regions. Funds have thus been directed to higher education infrastructure and program development. Another approach has been through the use of regulatory mechanisms. An example is the EC directive on tuition fee differentials, which states that a Community member must be treated as a national in any member country. This of course causes some difficulties, as some countries charge tuition fees while others do not. Entry qualifications are a further issue of attention: a person qualified in his or her own country is qualified in another, subject to some rudimentary conditions such as language requirements.

In addition to these measures, the EC is cognizant that actions taken for certain purposes hold consequences for higher education. A general directive states that a person desirous of functioning in a registered profession who has completed a three-year qualification in one country must be recognized as qualified to pursue his/her profession in any member country. Such directives have the natural effect of propelling countries towards a certain degree of harmonization. This can be instrumental for universities, which use such directives as an opportunity for convincing national authorities of actions they must take in order to be fully integrated into the European Community.

This pronunciation of the EC's platform evoked a flurry of responses from academics and government officials representing member countries. One of the concerns raised was the fear that universities are being confined to utilitarian purposes, and are coming to be regarded solely as economic instruments. This may undermine the role of universities in areas other than those that tend to promote economic development. This fear is prompted by a recent ruling of the European Court of Justice which asserted that higher education is part of vocational training and therefore an economic tool and fundamental to competitiveness. Another concern dealt with the "EC's tendency to overregulate." This was perceived as a threat to diversity and held the potential for the development

of a super-bureaucracy, which would have an inhibiting influence on higher education. It was suggested that the EC follow the American model of guaranteeing diversity by letting higher education grow, and not by overregulating it.

These concerns were downplayed by EC representatives who agreed that the EC has set economic objectives in higher education, but that it also acknowledges cultural issues. Previously the EC viewed higher education solely as a cultural tool and not under its purview. Now a balance has been established. It is not possible to run programs such as ERASMUS and only be interested in one aspect of higher education. Negotiations will doubtlessly take place in all facets of education. Finally, the EC cannot move ahead of the political will of its member states. Nor can it steer higher education in a different direction from that expressed by member states, as the political structure exists to resist this.

Finally, this discussion session focused on the use of accountability by governments as a tool for eroding institutional autonomy. In the United States the federal government retains control of research grants through affirmative action programs, setting conditions and deciding whether institutions will receive money or not. Action taken by some states, requiring public institutions to document student learning or strictly scrutinizing line items on budgets, have the same effect in reducing autonomy. The federal incursion has more or less disappeared as most institutions go well beyond the affirmative action standards. However, in states such as Florida the situation is more serious. There, Florida sunshine laws have forbidden university boards from having *in camera* sessions on sensitive matters. Universities have reacted by co-opting officious, bureaucratic administrators who are equally capable of keeping match with governmental games and defending university interests. The experimentation afforded by the federal system allows the more outlandish state experiments to be kept to a minimum and provides for a sort of self-healing mechanism. When things are introduced in one place and fail, others learn from the example. Thus, many of these autonomy threatening measures are not permitted to ferment into huge errors.

PART III

Issues in Higher Education

Discussion

THEME I: ORGANIZATION, PLANNING AND MANAGEMENT

Claude Lajeunesse, President of the Association of Colleges and Universities of Canada, introduced the session posing four areas for discussion. The first dealt with the tensions existing between the pursuit of cultural diversity and the quality of life goals on the one hand, and the need for balance in protecting culture while ensuring the development of a vibrant economy on the other. The second area dealt with how to set national priorities and establish a credible process for coordinating actions in the areas of training and research. He asked about institutions' experiences with accountability and autonomy, contending that universities and professors are kept accountable as they are subject to one of the most rigorous systems of ongoing evaluation and review. Despite this, a perception persists that universities are unaccountable and inefficient in their expenditures. The final area dealt with the spending power. In Canada, the use of the federal spending power is being tamed due to the need to reduce the deficit. Is the higher educational system to be improved by diverting funds to it from other sources or by improving efficiency in the system?

The perception of universities is as important as the reality. A myth of elitism still exists among the public, which is based on an earlier time when fewer people participated in higher education. Participation rates have shot up, but societal perceptions have not changed. There are two options to respond to this image problem. Universities can huddle behind their ivory tower or they can open up the system. The communication links to voters are obviously weak and need to be strengthened. In Canada, problems of accountability are compounded by the fact that spending on universities has been crowded out by the more publicly perceived, tangible needs of the health care system. Politicians feel that they are getting something real when they spend on health care, as money is being allocated for a purpose with tangible outcomes. Unfortunately, universities and their outcomes operate in different time frames than do

governments. According to one Canadian provincial government official, the objective of accountability is a continuous desire for improvements. Therefore, universities must generate an internal process, which leads to continuing improvements in areas like retention rates and other measurements that are comparable across the country. The best system of accountability is one of self-accountability that is clearly communicated.

In the area of autonomy and accountability, the German federal government often sets minimal standards, leaving the details regarding quality in research and the evaluative process to the individual *Länder.* Traditionally, Germany has focused on a notion of positive evaluation at the institutional level as a method for disbursing funds for research initiatives. However, money is being increasingly made available on a national basis through a competitive system. This has increased the amount of national evaluation of research proposals in the system.

Martin Trow discussed the importance of "slack resources" to American university research autonomy. These resources are skimmed from general operating funds and are difficult to defend to politicians, but they can be vital to serious and important research that might not have the kind of tangible outcomes governments desire. The application of knowledge has become more and more rapid. However, government laboratories in the United States tend to lag behind as they have grown more comfortable with their institutional security. In the university arena, innovation and creativity often come out of ephemeral and somewhat serendipitous circumstances and therefore depend on slack resources for their fruition. People come together quickly and can take immediate advantage of research opportunities. These slack resources themselves are often temporary and move quickly. This rapid ability to put accessible money around a new project is crucial to maintaining an unfettered scientific community.

A German *Länder* government official responded to the area of federal-state tensions and the setting of national priorities, saying that the problem is not one of cultural differences versus economic development. The German *Länder* are just as concerned with improving the economic standard of living as the national government is. The challenge is to develop a reasonable process for reaching these goals. The process used in Germany of balanced negotiation is one of cooperation with independence between different domains of education. This process is cumbersome and depends on consensus at the highest level, but as both levels of government share the same objectives, compromise has been used effectively. In light of these common interests, it is important that both state and federal governments be in charge of setting national priorities and allocating resources through collaboration and compromise. It is true that compromise is easiest when funds are involved. In other cases the temptation to put the issue aside rather than strive for a compromise has often proved to be too great.

In the view of some participants, Canada does not share this sort of co-operative arrangement in the relations between the federal and provincial orders of government. The present fiscal and other agreements between federal and provincial governments are not working because they are based on history and not on current interests. A provincial government official asserted that the federal transfer of funds to the provinces under the existing EPF arrangements has not helped to provide solutions nor to express a federal role in post-secondary education. Further, there is a need to expand the federal role in research as well as to streamline and redirect the student financial aid program administered by the federal and provincial governments so that it better supports the system. The New Brunswick Minister of Advanced Education and Training (participating on behalf of the Council of Ministers of Education of Canada) Hon. Russell King, spoke of the lack of a national will to communicate on educational issues. There is not sufficient coordination in his view among the various federal departments in Canada with a role in education, nor even a Cabinet committee. Even interprovincial coordination is hampered by the rapid turnover in provincial ministers on the Council of Ministers of Education of Canada. He proposed that a federal minister be a permanent member of the post-secondary education committee of the Council.

In the Swiss example, there is less tension between the federal and canton governments, as a consensual process of actively seeking compromise exists. The federal role has been primarily one of attempting to correct problems arising out of horizontal fiscal imbalances among cantons, which are the primary funders of universities. Federal aid is distributed according to these inequities and some cantons may receive up to half of their funding for higher education. This allows universities in smaller cantons to be equal to those in larger ones. However, the autonomy of universities may still vary, as in the United States, depending on the host canton. The federal government has also been involved in trying to establish horizontal links among universities in different cantons, which have enhanced autonomy. More recently, in the shadow of European integration, the federal government has intervened increasingly in university autonomy in an attempt to encourage technological development and greater mobility in order to enhance competitiveness.

The remainder of the discussion focused on buffer agencies and the different mechanisms used in various countries for mediating between federal, regional and institutional interests. How effective have these models for collaboration been at the political level? In Canada, there is occasional discussion on specific substantive issues but no ongoing mechanism exists for eliciting cooperation between the federal government and the provinces. Nor does such a regulatory body exist in the United States. Some other countries, Australia for example, have a stronger degree of ministerial collaboration between the two levels of government.

Germany has a range of mechanisms. Some issues such as public law, student aid and faculty salary settlements, have been made areas of federal legislative power. The *Länder* governments must therefore go through the federal legislative process to have an impact on these matters and this necessitates compromise. Several councils, with representation from the two levels of government plus other groups have also been established to deal with various issues. An example is the planning commission, which deals with the construction of universities. There is also a standing Conference of Ministers of Culture and Education based on a "one state, one vote" principle. The federal minister belongs but has no vote. The German Research Association acts as a buffer agency distributing funds for jointly sponsored basic research. The Max Planck Society performs a similar role, regulating the distribution of money for scientific research.

In Switzerland, there are many cantons with no universities, however, these are still involved in the process, as they participate in the Swiss Conference. A Conference of Rectors, heads of universities, also exists. However, a discrepancy exists between the different universities and the relative power of each rector within different university traditions. Pressures from the EC have acted to change many things in Swiss universities; mobility, for example, has been greatly increased. Such pressures have helped to speed the ponderous but very democratic decisionmaking process that exists between levels of government, as well as at the university.

In Australia, there are a number of mechanisms that act to facilitate cooperation between federal and state governments. The Australian Educational Council of Ministers dates from the 1930s. As the federal government has become more involved in higher education, this council has sought to develop national policies and has become a vehicle for negotiating with the states. The states in turn, have used it as a lobbying instrument. Federal commissions with state representatives have also been used as a mechanism. According to an Australian academic, Grant Harman, countries with a federal system find it more difficult to develop collaborative processes than unitary ones. There is a tendency to attend to policy either at the state level, or at the federal level. It is rarely done effectively at both levels so one level of government or the other tends to take over in initiating policy. In Australia, the federal government has the funds and better mechanisms for policy development, thus it has tended to assume a greater role and has developed the agencies to facilitate this. When the federal government took over financing, the role of the states was reduced and their coordinating agencies have since become lobbying bodies. The federal government increasingly deals directly with individual universities. The problem with this all-pervasive federal role is that it tends to strangle experimentation and diversity, the very benefits of a federal structure. For these reasons,

this highly centralized Australian process was not touted as a model for others to follow.

THEME II: FINANCING HIGHER EDUCATION

The Chair, Pierre deCelles, the president of the École nationale d'administration publique in Quebec, introduced the second session by enumerating some of the different policies and issues pertinent to the theme of financing higher education. These included such matters as: sources of funding, contributions to fixed assets, student aid, tuition fees, direct subsidies to universities, funding formulas, employment conditions of teaching and research staff, and the distribution of power with respect to funding. Who should finance universities? Is a multiplicity of funding sources a burden to universities or does it help safeguard their autonomy? Should funding be through direct financing of institutions or through students and research projects? And, what of the problems of direct and indirect funding of research?

A fundamental issue that needs to be addressed by universities is both their short- and long-term role. A close link exists between the resource needs of the university and the tasks that it is supposed to accomplish. Universities need to strike a balance between technological, cultural and social aspects as well as financial considerations. This leads back to the tension between universities as cultural agents and universities as economic tools. It also has a bearing on who funds universities and which aspects are funded.

It was generally agreed that a multiplicity of funding sources is desirable, as this helps to safeguard autonomy, encourages competition, and acts as a buffer against governments, whose money comes with strings attached and whose commitments often change with shifting voter preferences. For the same reason, it is pointless to separate out funding roles between orders of government, as each will always seek to intervene according to their notions of voters' wants and needs. The complement of funding can come from different levels of government, tuition fees, alumni donations, as well as private sources and income generated by the university through patents and so on. It is also important to tap all sources of governmental funding as often myriad granting bodies and agencies exist.

A balance must be maintained between alternative sources of funding, as private interests can have the same effect as governments in skewing university research priorities if they are relied upon too heavily. They can also undermine the role of the university by forbidding the publication of research results. The general agreement was that multiple sources of funding help to protect university autonomy and provide an incentive for greater competition among university researchers. This prompted an EC official, Denis O'Callaghan, to ask if autonomy, in the traditional sense, is perhaps obsolete. He asked if it should be

considered in a new light; in the ability to forge new and different partnerships in various quarters. Autonomy would thus be seen in the choice of when to enter a partnership or not.

Some countries do not enjoy the same variety of funding sources as others. Switzerland and other European countries do not have tax deductions, which are regarded as an indirect means of financing education. Many people do not donate to universities as there is no tax incentive and the donation process is too complex and troublesome. This is viewed as a result of the state's desire to maintain control of the system through direct funding, therefore discouraging such indirect payments. Another problem for Switzerland arises from low or zero tuition fees. This makes mobility difficult as students are discouraged from going anywhere tuition fees are high.

It was advocated that research funding come from both levels of government so that regional research priorities are not ignored. However, sometimes this is not possible as state governments may wish to be more involved in financing education and research but simply may not have the taxation powers to afford it. Such is the case in Australia, where an unbalanced vertical fiscal arrangement prevails. Australian universities are also undergoing a lot of expansion as the system is in a process of transition, becoming more accessible and responding to the needs of a changing population. This expansion is in the magnitude of 40 to 50 percent, and will likely have effects on other university functions.

Such expansion obviously requires money. Australia has opted for an arrangement of direct and indirect financing of education. Although the Commonwealth government has direct responsibility, it contributes approximately 70 percent and the rest is obtained from other sources. The University of Melbourne, for example, receives only 45 percent of its funding from the Commonwealth. The remainder of funds comes from a number of sources including university research and development, investments and assets, private donations (which receive 100 percent tax deductions), and full tuition fees for overseas students. Tuition fees had not been levied for many years, however, they were reintroduced in 1988 and some courses such as Masters of Business Administration are totally supported by fees.

Canada, like Australia, suffers from huge vertical fiscal imbalances. Provincial governments have traditionally relied on large federal transfers in order to meet their responsibilities, including higher education. These transfers have also included an equalization component to correct horizontal imbalances in the system and to allow have-not provinces to boast universities comparable to those of the richer provinces. However, Canadians are no longer content with the structural arrangements for financing higher education. Partially, this is a result of the fact that post-secondary education has been caught in the financial exigencies of the federal government, as well as the bottomless pit of provincial

health care. Per capita grants and other federal transfers are declining and threatening to make regional disparities more pronounced.

According to one senior federal government official, the financing of education is largely contingent upon which governmental umbrella covers it. The larger the umbrella, the more competition education will face. Under the current arrangements in Canada, education is made to compete with deficit reduction, an impossible task. However, when it was linked to defence, the pot for education swelled. In a federal system many different umbrellas exist and the priorities of each vary among the regional and federal governments. This has an impact on the financing of higher education in different governments.

Other concerns discussed included the problems between direct and indirect financing of research, as well as the more market-based practice of using students as the vehicle for carrying funding to the universities. Switzerland, among other countries, voiced concerns over the former issue. There, research is the responsibility of the central government, while financing universities is cantonal. Increasingly, there is a trend towards larger subsidies for technological research while general operating grants are diminishing. Universities are left with a shrinking budget to cover the indirect infrastructure costs of government research projects, while their own priorities suffer from underfunding. Universities must become stronger in their management if they are to take hold of how their money is spent.

One Canadian academic participant, John Dennison, spoke on the issue of funding students through a voucher system. The argument in favour of this in the Canadian context is that there is no constitutional objection. Students would receive vouchers which they could carry to the university of their choice. This would only cover instructional costs but it would encourage competition. On the down side, he conceded that it would probably be an "administrative nightmare." A representative from the EC (Denis O'Callaghan) also spoke in favour of increasing market forces in higher education by placing a greater emphasis on tuition fees as a means of financing. This would be a shift towards giving the consumer more power. The issue of tuition fees will become more pressing for EC member states as 1992 approaches and student mobility is encouraged.

THEME III: STUDENT MOBILITY

Francis Whyte from the Council of Ministers of Education Of Canada opened the session with a gentle admonition, reminding everyone that students, although hitherto absent from the discussion, are the basic *raison d'être* of universities and are also caught in federal systems. The unity and diversity theme is important here, as it is the responsibility of the federal structure to ensure that students benefit from the diversity allowed for in federalism, while

not being handicapped by its structures. Themes of student mobility to be considered include access, especially with respect to tuition fees, mobility among regions and countries; and the international recognition of degrees.

The distinction made in David Cameron's synthesis paper between the continental systems of Canada, Australia and the United States, and the more territorially compact European systems was discussed. Different issues exist within these geographic groupings. The continental system countries share a number of common characteristics. There, concerns over access are weighted according to institutional considerations and interregional mobility is considered to be less of a problem. In Canada, a few formal agreements exist between provinces while more of an exchange system exists in the United States. Tuition fees are the norm in both countries. In the European systems there is a greater focus on access through international agreements and interregional programs emphasizing mobility. Tuition fees play a lesser role in the European systems.

A Canadian provincial government official spoke on the mobility of students among programs and institutions, describing a program used in British Columbia for tracking students through their post-secondary career. The provincial government has found that students have a nonlinear path for getting from high school to where they want to go. Movement is greater and follows a different pattern than anticipated. It was expected that students would upgrade from community college to university; however, many are going in the opposite direction. As student needs change, it is important that institutions keep pace and facilitate this movement through credit transfers.

Grant Harman echoed this sentiment, adding that it is important to break down university snobbery. One must be careful about the notion of "drop outs": one institution's drop outs are another's new students. Therefore, it is important to consider credit transfers as well as changing demographics and the needs of both part-time and full-time students. Traditionally, Australia has placed more emphasis on access than on mobility. This has to be revised, as it has led to a lot of barriers to mobility among regions, such as different admission standards, etc. Graduate mobility is another practice that should be encouraged, as many students now continue on at the same institution. One of the problems in Australia is that the more rural and smaller state universities have trouble attracting students. To address this problem, it was suggested that universities try to specialize in order to attract and retain people.

According to David Cameron, public policy in Canada has tended to be relatively ambivalent on the issue of student access and mobility. To a large extent, this arises from the contention that there are a lot of students who should not be in university. After university expansion to accommodate the "baby boomers," it was anticipated that enrolment would taper off as demographics changed. However, this was not the case and enrolment has continued to increase. A Canadian federal official called this contention outdated, speaking

of the increasing demand for a post-secondary level of education. The latter can be attributed to many factors. Student aid programs have enhanced accessibility, universality has become an educational touchstone and minority participation has increased. In addition, demographics are changing and more mature students are returning to school as attitudes and market place demands change. The system must adapt to accommodate these factors. However, as one official pointed out, there is often some confusion regarding the definition of "university" versus "post-secondary education" among potential consumers. This has to be taken into consideration in order to expand the system appropriately.

The changing demographics of higher education have exposed some new mobility and accessibility problems. As one Canadian academic (Rod Dobell) pointed out, the market for higher education is changing. Technology is altering issues, making open learning more possible and changing the role of the private and public sectors in education. Currently, university and nonuniversity systems exist and work as two solitudes. This must end in order to facilitate easy mobility and access for students to enter and reenter in order to upgrade and change skills. Concomitantly, new ways of looking at eligibility for programs must be found. In Quebec, the traditionally rigid admission requirements have been relaxed somewhat in many institutions in order to accommodate mature students. These people are being admitted to programs on a case-by-case basis according to their "life experiences" and are often found to be just as successful in their studies. However, mature students have their own mobility problems as many are tied to a particular location by family responsibilities and similar constraints.

The European systems seem to be farther ahead in the area of student mobility and standardized admission requirements. However, they have also faced problems associated with increasing enrolment. Despite the advantages of proximity, there are some difficulties posed by language differences as well as differences in tuition fee levels. Some countries in Europe are unilingual, while others are multilingual. This difference of languages within a federation may cause problems of mobility from one language region to another even within the same country. In Switzerland, for example, there is no Italian university, despite a large Italian population.

In Germany, mobility is enshrined in the constitution. This allows students to pursue studies anywhere, providing that they hold an *Abitur*, the German qualification certificate. The *Länder* have a constitutional obligation to provide spaces in their institutions for students from other *Länder*. However, the demand is so great that the supply of qualified potential students has exceeded the capacity of the system. This has led to a great deal of tension. As well, extra tests which complicate the admissions process have had to be added. Germany has not considered implementing a tuition fee in order to cut demand. Although mobility is not a problem, there are tensions over who should pay; that is, the

Länder that the student came from or the *Länder* where they are educated and more than likely to remain.

The European Community's "ERASMUS" program has sought to enhance and encourage student mobility among European countries. This program is based on the notion that the EC will be well served by people who have experienced different cultures and languages first hand. Students study abroad through an interuniversity program, which has sought to harmonize curricula as much as possible. Thus far the program has been very popular and 40,000 exchanges have taken place. However, this is well short of the 10 percent target, which would amount to 100,000 students. Another program is the European Course Credit Transfer System. This program has worked out agreements on credit transfers in five different areas of study in order to facilitate the movement of students.

Some concern was expressed regarding the ERASMUS program by a Swiss academic. One issue raised dealt with the effect that this program will have on smaller linguistic communities. It is feared that students will be drawn to universities of big international languages such as French and German, and away from countries like Greece. This will cause problems for some students who must overcome language barriers and will therefore take longer with their studies. Another concern was raised with respect to EC pressures towards standardized qualifications and its impact on nations with relatively high educational standards. One Swiss academic noted that standardization would lead to a devaluation of the Swiss certificate and the quality of studies in that country.

THEME IV: RESEARCH PLANNING AND FINANCING

Keith Newton, of the Economic Council of Canada, introduced the session by highlighting three pertinent areas for discussion: globalization, fiscal arrangements and demographic change. Global forces are transforming education as the demands of the market place change. Will economic imperatives bring a trend towards centralization? Is there anything in the nature of research that suggests such a move? What differences in arrangements for financing research exist among countries? What national research strategies are currently in place? And, how is the national research agenda established?

In Canada, the area of research planning and financing has become increasingly complex as it has been proliferated by governmental and nongovernmental bodies involved in research and development. Bodies such as the National Advisory Board on Science, or the Ontario Premier's Council exist at both levels of government. However, spiraling costs and shrinking budgets have added to the clout of private capital in the university research agenda. This has been manifested in an increasing number of partnerships between universities

and industry. The sharing of research responsibilities among federal, provincial and private interests raises a number of policy issues dear to the Canadian federation: regional development, industrial policy and equalization payments, to name a few. Are these policy areas being considered in a framework for research planning and design?

Another issue raised involved the obstacles to communicating and sharing research and information, which must be cleared away if any policy on research planning and financing is to be efficacious in the long run. The communication of scholarly research is often hampered by restrictions placed on collaborative efforts by industry, limited journal space, and the high costs of electronic forms of transmitting information. Spending on research libraries is thus imperative. The problem is to ensure that research efforts are widely shared.

There was some discussion among Canadian participants regarding the separation of research and instructional funding into separate block funds in order to overcome the problems associated with direct and indirect financing of research. This was introduced by David Stager from the University of Toronto, who discussed the fact that merit pay is based largely on research activity, yet provincial support of universities is enrolment-driven. Would it not be more rational for the federal government to provide 50 percent block funding for research and the provinces to provide for instruction? The remainder of the funding could come from fees. This would reverse the existing arrangement by making research the basic grant and instruction the add-on. It would help to resolve the problems of the indirect cost of research, which governments continue to ignore. As it now stands, the more research-intensive institutions are being penalized as they must carry higher indirect costs associated with their research.

A Canadian federal government official explained that the deficiencies of research funding in Canada are largely due to the existing fiscal transfer arrangements, which put education under a fiscal heading. These arrangements were devised before Canadians became as conscious of the need for international competitiveness. The federal government feels that it is up to the provinces to provide the funds for indirect research costs out of their EPF transfers. He claimed that provincial ministers have never raised the issue of indirect research costs because it would acknowledge that the federal government has a role to play. Provincial governments are not keen on this split in funding. According to one provincial official, money is given based on the human resource development of clients not providers. Thus research is regarded as the pursuit of professionals seeking to expand their own credentials. The federal government has, for its part, felt some frustration that its research priorities are not being met as a result of the arms-length relationship that exists between it and its research granting councils. As a result, it has sought to put money into

the system through other avenues, for example the "centres of excellence" program to fund directed areas of research.

Martin Trow of the United States argued that there should not be a clear line of distinction between research and instruction and therefore between their financing. At the Massachusetts Institute of Technology, for example, undergraduates are taking part in research projects as part of their education. Thus the line between the two is becoming blurred, making distinct funding arrangements difficult. Funding decisions become difficult when some departments are primarily teaching departments, or when the stature of a department occasionally wanes and falls into a decline, needing to be buoyed up by the university community. Should funding decisions on allocations of resources be made externally according to market forces or by government priorities, or should they be made internally by the university, which has a better notion of where to allocate money for future needs and to keep weaker departments from dropping too low? Francis Whyte commented that the greatest contribution of universities is turning out brains, and research is important as it contributes to this. Therefore, he agreed that there should not be a clear line between research and education as universities exist primarily for students. Another government official was more blunt, pointing out that students and their parents vote, research does not.

There was some discussion of the different funding arrangements for applied versus basic research and the mechanisms for allocating research funds in some of the European federal systems. In Germany, funding for research is based on the distinction between applied and basic. Basic research is that carried on by all professors in Germany. All are researchers as part of their job and they decide what they research. However, funding to researchers is not enough to cover all of their expenses and they must find more elsewhere. National research facilities exist, jointly funded by the federal and *Länder* governments and technology funds are provided to universities, as well as to industry and to research institutes. There is also some funding available from the EC. The German constitution provides for research funding based on agreements between the federal and *Länder* governments. These set out how research is to be carried out and funded. However, basic research is often neglected in such arrangements.

The specific decisionmaking mechanism for funding basic research is based on peer evaluation and trust. Academics make proposals and these are voted on by central committees, which are structured according to discipline and have government and academic representation. This is a self-regulating control body; anyone who wants money must apply to these national research associations. For larger projects where a lot of money is committed, there is much tighter control by government researchers. Centres of excellence also exist throughout the country. Academics apply for status and the decisions are made by their

peers and not the government. European integration is bringing the fear that, as researchers are not organized, research will increasingly be controlled by a large bureaucracy in Brussels.

Switzerland has a similar process, which places emphasis on peer review. Four-year research plans are submitted to the federal government, which negotiates and adopts the plan and allocates funds. Once researchers get the money they become autonomous and allocation between individuals is done at this level through peer review. The results of this process have been satisfactory. There is a different process for industrial and applied research.

In Australia there is a public policy tension between arguments for a tightly coordinated research policy directed at meeting changing market demands, and the notion that research must be left to individuals. While federal agencies exist, there is no single overarching agency for coordinating a central policy. Often coordinated research programs have not been very successful, but a perception persists that increased funding of research will help to solve economic woes.

PART IV

Final Session

Rapporteur's Comments: Hasty Generalizations, Missed Opportunities and Oversimplifications: Overcoming the Obstacles to Understanding Higher Education (Whatever That Is) in Federal Systems (Whatever They May Be)

J. Stefan Dupré

As your rapporteur, I had no problem selecting the title I have given to these remarks. A conference on a subject as vast as higher education in governmental settings as diverse as those of federalism faces a daunting obstacle course. It can easily drift on a sea of hasty generalizations. In the process, it can miss assorted opportunities to snatch coherence from the jaws of confusion. And it is always beset by the temptation to oversimplify the realities which it is seeking to grasp.

This conference has had to face all of these obstacles. It was fitting that your participation should be rewarded with an evening boat tour through the Thousand Islands. As Principal David Smith put it in his opening remarks, this cruise might inspire you to think of each island as a university that nourishes the stream of the society in which it is situated.

I perforce excused myself from the cruise so that I might prepare the remarks I am about to make. But having taken it on previous occasions, I can well recall that the particular stream you were navigating comes perilously close to being an open sewer. So let me congratulate you for completing the cruise without falling overboard. As for the conference, I congratulate you as well. Due reflection on your proceedings persuades me that you overcame many of the obstacles you had to face. You may have flirted with a few hasty generalizations,

missed the odd opportunity and oversimplified on occasion, but I find much that is sterling and little that a few sober second thoughts cannot remedy in the time that remains available. Let me begin with hasty generalizations.

HASTY GENERALIZATIONS

At an early stage in your proceedings, discussion focused on the following proposition. Global economic forces which generate knowledge-driven economies have a centralizing effect on higher education. To your credit, I think, your deliberations nakedly exposed this proposition as something that is indeed a hasty generalization. Far from having a centralizing effect, global economic forces have a strongly decentralizing thrust. For one thing these forces foster degrees of specialization that constitute a potent reminder that the labour markets for many occupational skills are subnational, indeed local. They remind us as well that the multilingual skills which are so important to international communication are best acquired not by teaching all languages everywhere but by immersing learners in geographically specific communities. The same global forces remind us further that in a world awash with economic uncertainties — uncertainties that supremely beset the matching of human skills to changing job requirements — diversity and experimentation are the only insurance policy that can keep small mistakes from blossoming into huge errors. In a globalized, knowledge-driven economy then, much of what you have discussed points in a direction that leads diametrically away from centralization.

I shall now take up a second hasty generalization. This one proved somewhat more difficult to overcome. The proposition to which I refer runs as follows. A minimal response to the current global economic challenges is better coordination, more rationalization and enhanced funding coherence in the field of higher education. Your early deliberations flirted dangerously with this proposition. So much was this the case that when Daniel Elazar had to leave the conference prematurely, he told me he would be perfectly happy if I conveyed to you the following message. He was leaving awed, saddened and relieved. Awed by the capacity of the managerial mind to manufacture coordinating schemes. Saddened that the managerial mind so easily ignores the virtues of multiplicity. And relieved as he reminded himself that extravagant coordination schemes always turn out to be unworkable anyway.

I must tell you that at the time Dr. Elazar gave me this message, I was myself in a state of acute discomfort. Happily, however, your subsequent deliberations brought me first relief, then elation. To distil the wisdom of these deliberations, I will focus in particular on your about-face concerning the subject of funding coherence. Peter Hicks played a catalytic role in producing this turnaround but many of you outdid yourselves in following his lead.

To posit the desirability of funding coherence is indeed to fabricate the hastiest of generalizations. This is because there is no escaping the importance of clienteles in generating support for higher education. Just as there is a wide diversity of clienteles for higher education, so is funding diversity in its best long-term interests, whatever the resulting incoherence. Consider in turn core funding, research funding, targeted funding and student funding.

Core funding, to be sure, is of enormous importance. It is supremely important, as Ulrich Teichler emphasized, in Germany, but only a few degrees less important in Canada and the other countries represented at this conference. This is because core funding preserves the capacity of individual institutions to make their own trade-offs among programs and between research and teaching. It is precisely for this reason, however, that institutions constitute the basic clientele for core funding. Meantime, the competitors of core funding are all other public priorities, including the pressure to balance government budgets. It follows that core funding can never constitute an entirely secure base for higher education, not least because the institutions are its relatively isolated clientele.

Enter, at this point, research funding. Research funding has numerous clienteles in addition to institutions — curiosity-oriented researchers, proponents of big science, business firms. This funding is of course inherently exposed to swings in preferences between basic and applied research, to proprietary claims over findings and to a host of other issues. However, its multiple clienteles and its assocation with economic growth give research funding an edge in the competition for government resources and a measure of insulation from budget-balancing cuts.

Consider now targeted funding, as in the field of manpower training and skills development. Here universities are among many competitors on a stage crowded by technical institutes, colleges, apprenticeship programs, industrial sector-specific courses, on-the-job training and the like. But the clienteles for this funding are at least as diverse as in the case of research. In one respect, they are even more diversified because they include labour unions. It follows that governments cannot dismiss claims for targeted funding lightly, and the extent to which manpower training can be linked to economic growth means that this form of targeted funding, like research, can become a high budgetary priority.

Finally, there is student funding. As Martin Trow reminded us so well, student assistance enjoys the most democratic of all clienteles. Here we find all present and future students plus their parents or spouses. The American experience with student assistance during the Reagan years testifies most impressively to the resilience of this source of funding in the face of a neoconservative government agenda.

What clearly emerges is that support for higher education is visibly dispersed among different sets of clienteles, with each set oriented towards a different

source of funding. This leaves the desirability of funding coherence as a proposition formulated by tidy minds that fail the test of reality. Fiscal diversity, not coherence, best serves higher education because it ensures that the interests of disparate clienteles will press for its support.

MISSED OPPORTUNITIES

Having addressed the hasty generalizations that this conference has exposed, let me turn to the matter of missed opportunities. I am using the term missed, as distinct from wasted, advisedly. I could detect no opportunities that this conference wasted for lack of perceptive observations on important issues as they arose. This led me to search for an integrating principle with which to structure any of a number of these observations. I found a gem in Denis O'Callaghan's altogether enlightening remarks on the European Community. I refer to his profoundly thoughtful invocation of the hallowed Thomistic principle of subsidiarity. Applying it as Mr. O'Callaghan did to intergovernmental relations, this principle focuses on the importance of lower levels of government, where all matters are best done unless there is convincing proof to the contrary. By invoking the principle of subsidiarity, Mr. O'Callaghan was offering a healthy measure of reassurance to his European colleagues as they worried about whatever power-hungry bureaucrats lurk behind the European Community.

To leave matters there, however, would be to miss a splendid opportunity to structure your deliberations. Not least because I am an old student of Thomistic philosophy, I owe it to you not to miss that opportunity. The principle of subsidiarity is far more than a guide to intergovernmental relations. It is a fundamental principle of social organization. Pursuant to this principle you begin at the bottom. Everything that is best done on the ground should be left there. What is appropriately done at successively higher levels of organization should always bear the burden of proof. Proof has to do with whether the higher level will generate value added. The principle of subsidiarity is of fundamental importance to higher education.

Higher education begins on the ground within the university. It is generated in the professors' offices, the lecture halls, the seminar rooms, the laboratories, the libraries. If you are seeking creativity and learning, these are the places where you will find them. As Martin Trow pointed out, the best minds in universities have never heard of the higher education bureaucrats who populate government agencies. Why should they? Do these people generate any value added?

Pursuant to the principle of subsidiarity, the first step in the search for value added remains within the university, just above the ground at the level of administrators. What clearly emerges from your deliberations on a cross-

national basis is the vital importance of skilled university management headed by a CEO president rather than a *rector magnificus*. Here you find the value that is added by the will to defend institutional turf against roving bands of would-be government rationalizers, and by the fiscal acumen required to juggle diverse sources of funding. As Martin Trow reminded us, the art of fiscal management is to create the slack resources that can constitute precisely what is often crucial to scholars and scientists on the brink of cross-disciplinary innovations.

The next level at which to look for value added remains well short of any coordinating bodies or bureaucracies. It takes you into the enormous variety of accountability mechanisms from peer-adjudicated grant selection committees to accrediting bodies and discipline review groups. Note that such mechanisms are just as easily and often more appropriately tied to voluntary agencies than to government departments. Claude Lajeunesse scored a very fair point when he hypothesized that universities may well be subject to more accountability mechanisms than any other institution in society. What becomes crucial, in this regard, is the problem of aligning political perceptions with the reality of this accountability. This problem is all the more challenging in light of the reminder that a cabinet minister, the Hon. Russell King, offered us. Politicians are birds of passage. On the Council of Ministers of Education of Canada where he sat, Mr. King could find only two ministers with four years in their portfolio. All the rest were junior.

In this light, a point made by Gary Mullins deserves emphasis. It has to do with the importance of face-to-face contacts between politicians and university presidents. Whatever the value added by intermediary agencies or buffers, politicians must have quick and easy access to what is on the ground, where the action is. Presidents must ensure that university walls have windows.

What will persist is a plea made by Minister King, a plaintive plea I have heard from many politicians. With so many agencies, so many accountability mechanisms, such diverse institutions, who does a minister call when he has a problem? I restrained myself from entering the proceedings when he posed this question, but here is my answer. "Minister, identify the individual you believe is the smartest university president in your jurisdiction. When you have a problem, the chances are that between this individual and whoever is in charge of the institution's government relations, you will get not only the right list of phone numbers but the sequence in which to call them." This is my answer because I do indeed believe in the principle of subsidiarity. Never miss any opportunity to put it to work. However high the level of decisionmaking, including the ministerial, the keys to problem-solving will be found on or close to the ground.

OVERSIMPLIFICATIONS

I come now to the last item on my list of obstacles to understanding higher education: oversimplifications. To your credit, what had become perfectly apparent as your deliberations were winding down was that they could not be confined by the notion that higher education can be equated with universities. You rightly detected the major flaw in an otherwise admirable set of background papers. What the papers gained in coherence by equating higher education with universities came at the cost of ducking the ultimate reality of the knowledge-driven society.

If the eighteenth century citizen of Rousseau's enlightenment was forced to be free, the contemporary citizen on the brink of the twenty-first century is forced to be knowledgeable. This citizen will neither be confined to universities nor to other institutions of higher education. The search for knowledge is multiplying all kinds of noninstitutional forms of learning. In the process that old demographic standby, the 18 to 24 age cohort, becomes irrelevant to higher education. The issue of student mobility among universities remains alive, but is a trivial part of a far broader concern. This one involves mobility and transfer of credits not only among various types of institutions but among institutions, on-the-job training programs and computerized at-home forms of learning likely drawn, note well, from internationally packaged materials. Gail Babcock, Pierre Cazalis and Rodney Dobell are among those who infused your proceedings with insights that helped to overcome the oversimplification involved in equating universities and for that matter institutions with higher education.

I would like to comment on another oversimplification if only because this conference should not close without recognizing its existence. Quite frankly, the "universities" which the papers posit strike me as grossly oversimplified versions of at least the so-called "full-service" universities that exist in the real world. Such universities, may I remind you, have health science sectors. As such, they intersect with another incredibly complex set of institutions called hospitals. The governance and financing of these institutions are in turn stamped by the peculiarities of the federal regimes in which they are found. Is it a fair statement that the systems that finance university hospitals have all the earmarks of an open sewer?

Whatever the answer, the complexities that lurk at the interstices between the health care and higher education sectors are staggering. Runaway health costs in many jurisdictions are in part a function of the number and mix of professionals produced by educational institutions. The funding of these institutions, especially their core funding, is constantly threatened in turn by the seemingly insatiable and technologically driven demands of hospitals which are responding to their own sets of expectations, harbored by public clienteles even more concerned with health than knowledge. Meantime, at the various

levels of government, higher education officials confront a vast continent where ministries of health, hospital commissions, public and private health insurance agencies, professional and para-professional licensing bodies, and separate research agencies jostle one another at the same time as they stand ready to do battle with universities.

A great figure in the history of Queen's University, the late J. Alex Corry, once told me something about health care and higher education that I have never forgotten. Having presided over this full-service institution with its health science sector, he said "If I were heading an institution with no medical faculty and someone came to offer me one, I would reply 'young man, you can keep it; it's a bottomless pit'." In this light we should readily forgive the authors of the background papers for writing about universities as if the health science sector did not exist. Indeed, we should be grateful that their oversimplification spared us such a challenge to the tidy mind.

The Alex Corry I have just quoted is the same Alex Corry who, in his capacity as a political scientist, authored the immortal line that the tidy mind is a liability for understanding federalism. It is appropriate that I should close my remarks by addressing that subject. What a dog's breakfast! Coming to grips with federalism on a comparative basis has involved trotting out all the time-honoured labels. Thus we employed the terms "executive federalism" and "executive interprovincialism" to convey the essence of the Canadian federal system. There is "intrastate federalism" to capture the importance of congressional committees in the American federal system. There is "interlocking federalism" to describe the German and Swiss systems. There is "emerging federalism" for Belgium and the European Community. What to me is a new term, "hard federalism," was coined to describe the contemporary Australian federal system. For all their utility in structuring a comparative discussion of federalism, these terms can be deceptive. I submit that higher education offers a strong reminder that the dog's breakfast elements of federalism transcend any scheme of classification.

Consider, in the Canadian case, "executive federalism" and "executive interprovincialism." These terms convey nothing of the ironic realities that arise in the financing of Canadian higher education. How unfortunate it is that the Hon. Robert de Cotret was unable to attend the conference dinner. Had he come, Martin Trow, who is proud that he cannot tell us the name of the top higher education official in Washington, could have gone home saying he not only knew his counterpart in Ottawa, he had dined with him. And he had learned that the Canadian's job was to try to ensure that the federal government gets credit for tax money that provincial politicians are responsible for raising. Some people might call this typically Canadian; I also call it a dog's breakfast.

Deceptive oversimplification lurks behind other terms as well. Consider "hard federalism," used to convey the centralization that has been at work in

Australia. Robert Smith and Fiona Wood, in the very paper that coins this term, also point out that the governing boards of Australian universities are converting the office of vice chancellor into a strong CEO position. I would hypothesize that thus transformed, Australian vice chancellors will be equipped to defend institutional turf against would-be centralizers. I would surmise that they will also cultivate diverse funding sources. Paul Hickey pointed out that the University of Melbourne is in a situation where, whatever the ostensible degree of centralization, its core grant accounts for only 55 percent of its revenue. Hard federalism, then, may mask a reality that is very different from centralization.

I conclude that if higher education in federal systems defies simplification, the reason lies in the strength and resourcefulness of what is on the ground. This is the principle of subsidiarity at work. And with respect to capturing the essence of the relation between higher education (whatever that is) and federal systems (whatever they may be), I commend to you a term employed by Ulrich Teichler, "balanced negotiation." Balanced negotiation between what is on the ground and what resides in government produces feasts that may look messy to the tidy mind but are a joy to the canine palate. I for one am proud to be a tough old member of that breed.

Discussion

The principle of subsidiarity, introduced in Stefan Dupré's remarks, and its significance to federalism figured prominently in the discussion. The first question of the session speculated on whether it would have made a difference if the conference had been on higher education in unitary states, rather than federal ones. The notion of subsidiarity seems to imply that it does not matter what governments and bureaucrats do, nor what political structures and arrangements exist among them; universities will carry on. Dupré agreed with this contention, noting that one of the countries represented, Belgium, still exists basically as a unitary state, despite the diversity and decentralization that has taken place there. In Canada, there are ten provinces that behave more or less as unitary states in many capacities. Ontario, for example, has 16 institutions in a territorially-based system, matched by a legislature that is in turn territorially-based. If unitary states had participated in the conference, there would have been a lot of commonality noted.

A German academic, Ulrich Teichler, disagreed with the notion that higher education faces the same setting in a unitary form of government as in a federal state, as different networks of negotiation exist in these different models. In a unitary state there is not the same opportunity for experimentation, thus government misinformation and errors have a greater potential to flourish. He also noted that the Canadian experience with the rapid rotation of educational ministers is not necessarily endemic. In Germany, specialized officials are emerging, making the dialogue between governments and universities more sophisticated, as each side gets more professional.

Dupré agreed that federalism, because of the multiplicity of governments and actors, can build in checks and balances, giving federal states an edge over unitary ones in preventing the spread of misinformation and similar problems. However, whether one is looking at unitary states or federal ones, a "high powered lying contest" exists between governments, their bureaucrats and university administrators. This is not always intentional, however, the

opportunities for this multiply in a federal system with myriad levels of government and layers of bureaucracy. Within federal systems there are many examples of the principle of subsidiarity being violated, as governments step in to make decisions better left to university administrators or individual researchers. For example, the rigidities imposed by some American states on the budgeting procedures and resource allocations of their public universities is strange in the context of the diversity of the American federal system, and would seem to be more characteristic of a unitary state.

A Canadian academic, David Stager, noted that there had been some discussion regarding the appropriate shape of a planning model that could deal with matters such as priority setting and coordination. However, the market model also deals effectively with many of these same issues. He wondered to what extent is there a role for market forces within the operation of the educational system itself, as opposed to a role in defining the product of the university system, i.e., research. How can the market model be accommodated into the instructional side of higher education and would this market model function better in a unitary or a federal state? It was noted that the United States certainly has been successful in its use of a market-driven model for higher education. In Canada, there will likely be a trend towards a greater market-based approach. This will probably surface first in a province and not nationally, and will not necessarily be the result of government action. Dupré gave the example of the University of Toronto Executive MBA program, which is based on market principles and doing very well. In such examples, market forces and the principle of subsidiarity are seen to be complementary, as they both stress the importance of what is "on the ground" in the day-to-day operations of higher education. There, local economic and educational needs of the labour market are felt and met in such matters as apprenticeship. Another economic principle to consider is that of externalities, as higher education defies being contained in boundaries. Many more boundaries exist in a federal state, leading to more levels of subsidiarity.

It was noted that in higher education, the principle of subsidiarity does not stop at university administrators but continues down through the ranks of the university as decisions and so on occur at every level. Nor is this confined to universities, as community colleges are also important. Does this concentration of subsidiarity within the university reduce action to a "sum of rising self interests"? Dupré did not think so because of the action of competition between interests. He noted the virtue of a multiplicity of interests in a federal system, expounded on by Madison in the *Federalist Papers*, as one of the best ways to act against factions and views inimical to the public good, which are more prone to becoming dominant in territorially-specific communities. A distilled notion of the public interest is more likely to emerge in a federal system through a multiplicity of interests. At times this has led to high level government solutions

being favoured over low level government solutions in the area of post-secondary education. However, the "public interest" is not the specific or sole purview of any particular level of government.

There was some concern raised about closely equating the federal principle with the principle of subsidiarity, as the latter means many things to different people. For example, many Eurocrats may deem this principle as a rationale for transferring things to higher levels when they are seen to be too expensive to be left at lower levels of competency, as this discussion is generally advocating. Thus, the principle of subsidiarity may be too open to oversimplification and the "pat solutions" of neat and tidy minds.

One provincial civil servant noted that the significance and impact of the media on institutions had been absent from the colloquium discussion. Most politicians are more cognizant of the role of the media than universities seem to be. Institutions must learn to be successful in using the media. On another note, he discussed the Newfoundland Minister of Education's "Triple E" agenda for education: equality, excellence, and efficiency. Out of these three, efficiency was the most dominant topic of the colloquium as a result of the financial constraints felt everywhere, with a little time being spent on excellence and accessibility. What of the growing public expectation that there is a universal right to higher education? When considering efficiency, politicians feel that the education system has become fat and overadministered.

Dupré took note of the public confusion identified in equating higher education with university, and the expected economic payoff of a higher education associated with skills development. This expectation is growing as the twenty-first century citizen is "forced to be knowledgeable or face unemployment insurance." The system, including educational institutions and the private sector, must rise to meet this sociological reality but *not* through one giant coordinated effort, which would be destined to failure and act against the notion of subsidiarity. On the efficiency and accountability argument, i.e., that institutions are fat, Dupré noted the previous discussion on the desirability of multiple sources of funding, which act to make institutions accountable. He also noted the rigorous process of evaluation and peer review undergone by academics. He contended that the third "e" of equality can be worrisome. While American institutions are well ahead of legislation in the area of affirmative action there is still a lot of controversy over "politically-correct thinking." From some perspectives this is threatening the integrity of the academic enterprise as it uncritically equates any form of curriculum change with the particular interests of an ethnic community in order to address past wrongs.

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